AL 2.1992-285

University of Alberta Library
0 1620 3432105 7

# THE BUSINESS OF AGRICULTURE

## Career and Life Management 20

S
535
A3
P33
1988

CURR

Alberta
AGRICULTURE

UNIVERSITY OF
ALBERTA

Ex Libris
Universitatis
Albertensis

January 1991 - 2000 copies
For further information contact:

Alberta Agriculture
Ag. in the Classroom Program
Agricultural Education Branch
2nd Floor, 7000 - 113 Street
Edmonton, Alberta T6H 5T6

Phone: 427-2402

CANADIANA
JUN - 2 1992

# THE BUSINESS OF AGRICULTURE

## Shopping for a Future

A Resource Book For Teachers
of
Career and Life Management 20

Alberta Agriculture
1988

UNIVERSITY LIBRARY
UNIVERSITY OF ALBERTA

# INTRODUCTION

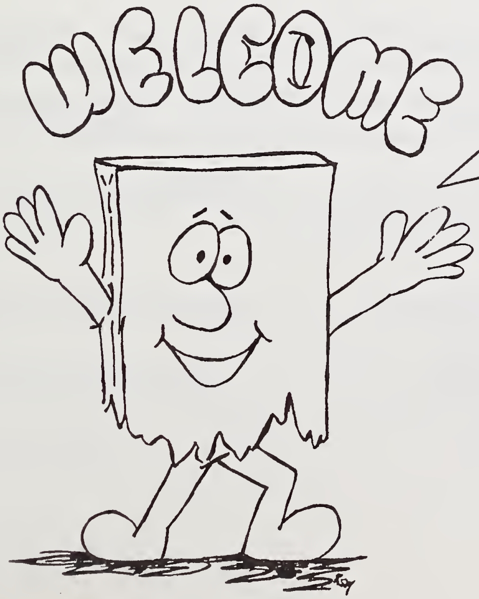
**Welcome to The Business of Agriculture!**

This is one of a series of handbooks written for teachers of senior high school students. It relates specifically to Career and Life Management 20, Theme D: Careers and the World of Work. Other handbooks in the Division IV series will aim at the Science 10, 20, 30 and Social Studies 10, 20, 30 curriculums.

Modern agriculture is much more than farming. Agriculture in the Classroom materials focus on five concepts that characterize agriculture as it exists today:

- **i** diversity of enterprises
- **ii** production, processing and distribution system
- **iii** capital and technology intensity
- **iv** economic importance to society
- **v** importance of soil and water to production

Implications of these concepts link agriculture to all Albertans, and make it especially important to young people contemplating their possible careers.



*Hi teacher.*

*I am Everykid, and I'm shopping for a future. The grocery bag is because I'm embarrassed not to have picked a future yet, so I don't want you to know exactly who I am ... but*
*I'm all around you.*

*I'll be cropping up throughout your book as a guide to what's happening.*

Along with their daily work your students are busy shopping for their futures. Some may know exactly what they want, but many have still left their decision open and a few are desperately confused. This handbook aims to help you guide their search; hence its sub-title, Shopping for a Future.

In their curriculum guide for Career and Life Management 20, Alberta Education allots 11-13 hours for Theme D. Agriculture employs nearly one-third of all Albertans, so we have written you a unit with which your students can survey a broad selection of agriculture careers in four or five hours. The techniques developed here can also be applied to other economic sectors.

The booklet contains four activities. Activity One emphasizes the diversity of employment opportunities in agriculture. This is an important step since many high school students equate agriculture with farming and see no role there for themselves. The lesson also shows how people in various careers interact at work.

The idea of systemic interaction among people throughout the agriculture sector is expanded in Activity Two. Together these lessons give students an opportunity to see how people work, and at what jobs, in agriculture.

Having considered the overall character of the agriculture sector, students can begin to consider whether they have interests in the field. Two activities assist them with this. In Activity Three, students identify how specific choices, accidents or levels of attainment determine what possible choices they can make. In Activity Four, students state goals of their own, then develop strategies for achieving those goals.

Shopping for a Future is meant to serve as a teachers' handbook. In writing the procedure sections for these lessons, we intended them to be clear enough that you can use them "off the shelf" if you wish. However they are only suggestions, and you are free to adapt them to suit your needs and your students' interests.

Each activity includes enough resources for students to complete the work. The data sheets, reference sheets and student activity sheets required follow the procedure write-ups in each activity. Several of the resource sheets need to be photocopied and cut apart before starting the lesson. We are confident that this initial work will be amply rewarded by the increased ease you will have in teaching the unit.

The Alberta Agriculture Film Library or Publications Office may have additional relevant resources. You can obtain a publication list or film catalogue by writing to either, at:

Information Services Division
Alberta Agriculture
7000 - 113 Street
EDMONTON, Alberta
T6H 5T6

# CREDITS

## ORIGINAL EDITION

**Production:** Alberta Agriculture<br>Agriculture Education Branch

**Writer:** Cole Pederson

**Proof Reading:** Cole Pederson, Cindy Dixon, Betty Gabert, June Gingras

**Resource Development:** Roberta Mazurenko

**Artwork:** Roberta Mazurenko

**Production and Layout:** Roberta Mazurenko, Cindy Dixon

**Project Management:** Betty Gabert

**Word Processing:** Elvia Sandoval, Alaine Roberts, Julie Gregor

## REVISION

**Production:** Alberta Agriculture<br>Agriculture Education Branch

**Editor:** Roberta Mazurenko, Gary Taljit

**Proof Reading:** Betty Gabert, Julie Splawinski

**Resource Development:** Roberta Mazurenko

**Artwork:** Roberta Mazurenko

**Production and Layout:** Cindy Dixon, June Gingras

**Project Management:** Betty Gabert

**Typesetting:** June Gingras

Digitized by the Internet Archive
in 2015

https://archive.org/details/businessofagricu00pede_0

# TABLE OF CONTENTS

| ACTIVITY | | PAGE |
|---|---|---|
| ACTIVITY 1: | "OH-H-H, JUST LOOKING THANKS" ................ <br>Students survey the agriculture career market. | 1.1 |
| ACTIVITY 2: | "CAN I TRY THIS ONE ON FOR SIZE?" ............... <br>Students role play responses to problems in various agriculture sectors. | 2.1 |
| ACTIVITY 3: | "WHY DON'T YOU TEST DRIVE A FEW?" ............. <br>Students trace the effects of various choices on long term career prospects. | 3.1 |
| ACTIVITY 4: | "THIS IS THE ONE FOR ME!" ...................... <br>Each student states some personal lifestyle goals and/or a career goal; then identifies a path to those goals. | 4.1 |

# THE BUSINESS OF AGRICULTURE
## CAREER AND LIFE MANAGEMENT 20 - SHOPPING FOR A FUTURE

| LESSON TITLE | CURRICULUM FIT/ LESSON CONCEPT | MAJOR AGRICULTURAL CONCEPTS | COGNITIVE LEVEL | OBJECTIVES AND SKILLS |
|---|---|---|---|---|
| 1. "OH-H-H, Just Looking Thanks" | Career and Life Management 20 Theme D: Careers and the World of Work/<br>Personal career plan, identifying alternatives. | Economic Importance<br>Production, Processing & Distribution Systems<br>Diversity | Comprehension | Working in groups, students identify the system linkages in production of one type of food. Review profiles of 127 agriculture related occupations. |
| 2. "Can I Try This One On For Size?" | Career and Life Management 20 Theme D: Careers and the World of Work/<br>Personal career plan, identifying alternatives. | Economic Importance<br>Production, Processing & Distribution Systems<br>Diversity | Comprehension | Students identify specific occupations in the production, processing and distribution system that can help them to solve a production problem. |
| 3. "Why Don't You Test Drive a Few?" | Career and Life Management 20 Theme D: Careers and the World of Work/<br>Exploring potential occupational options.<br>Importance of effective decision making to the career planning process. | Diversity | Comprehension | Student's investigate how various life choices affect one's career possibilities. |
| 4. "This Is The One For Me!" | Career and Life Management 20 Theme D: Careers and the World of Work/<br>Assess supporting and inhibiting factors in achieving life goals. | Diversity | Comprehension | Students state a career goal and identify major steps to be taken and obstacles to be avoided in achieving that goal. Make a personal career plan. |

# Activity 1

## "OH-H-H, JUST LOOKING THANKS"

| | |
|---|---|
| **OBJECTIVE:** | Working in groups of five, students will identify the system linkages in production of one type of food. |
| **CURRICULUM FIT:** | Career and Life Management 20<br>Theme D - Careers and the World of Work |
| **LESSON CONCEPTS:** | Personal Career Plan, identifying alternatives |
| **AGRICULTURE CONCEPTS:** | Economic Importance<br>Production, Processing and Marketing<br>System Diversity |
| **COGNITIVE LEVEL:** | Comprehension |
| **MATERIALS REQUIRED:** | Agriculture sector careers poster (included)<br>Production sheets (included)<br>Career Reference Card File (included) |
| **TIME REQUIRED:** | One or two 50 minute classes |

# BACKGROUND - For the Teacher

In most theories of planning, regardless of subject matter, the first step to a plan is information gathering. The value of a plan is often limited by the amount and accuracy of the information on which it is based. This is as true of career planning as of any other kind.

Success in career planning depends on gathering information about two questions:

what talents, potentials and interests does the planner have?

and

what opportunities exist?

Information gaps on either question can result in career plans that fail to lead the planner to the success and enjoyment he or she anticipates.

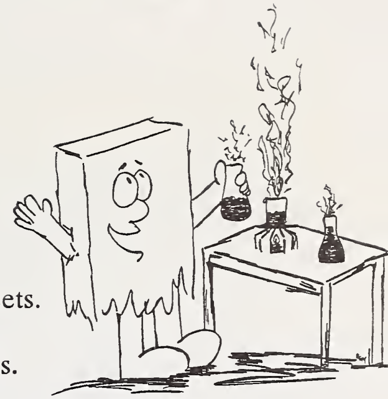
This lesson is about information for the second question. It focuses on career opportunities in agriculture.

Most students in urban schools will have given no thought to working in this area, yet today about one-third of Albertans work in agriculture related jobs. An industry with that many opportunities must be worth at least a look.

In working through this lesson, students will come to realize the wide variety of careers in agriculture, what people in those careers do, and what rewards they receive for doing it. If you are able to include time for group presentations to the class, students will get an even better understanding of how varied the opportunities are.

## PROCEDURE

### Part 1



**Preparation**

1. Photocopy the Production System sheets.
2. Prepare the career reference card files.
    a. Photocopy the sheets.

> **NOTE**
> Many of these careers are important in several production chains. As the need arises, make extra copies of those cards.

    b. Cut out the individual career descriptions.
    c. Mount the separate descriptions on index cards or other light cardboard.

> **NOTE**
> You can make these cards last longer by coating them with plastic.

    d. Establish a file for each zone in the production system: suppliers, processors, marketers, researchers, inspectors and regulators.

3. Your students will work in groups of 5 or 6. Decide on the number of groups you will have and how they will be established.

## Part 2

### Introduction

4. Assign or have students choose working groups of 5 or 6.

5. Explain the following:

   a. each group is to investigate what careers are involved in producing one type of food.

   b. within groups, one member is responsible for the careers in each sector of the display poster.

6. Ask the groups to distribute tasks within 2 minutes.

**NOTE**
In groups of 5 one member can do both research and regulatory careers, in groups of 6 these sectors can be separated.

## Part 3

### The Activity

7. Have one member from each group select a production sheet. This will determine what foods the team will investigate and show the members what other careers are involved.

8. Group members select the cards they need from the appropriate reference file.

9. In turn, members read their job descriptions to the group.

   Producers should read first, then suppliers, processors, marketers, researchers and inspectors.

## Part 4

### Conclusion

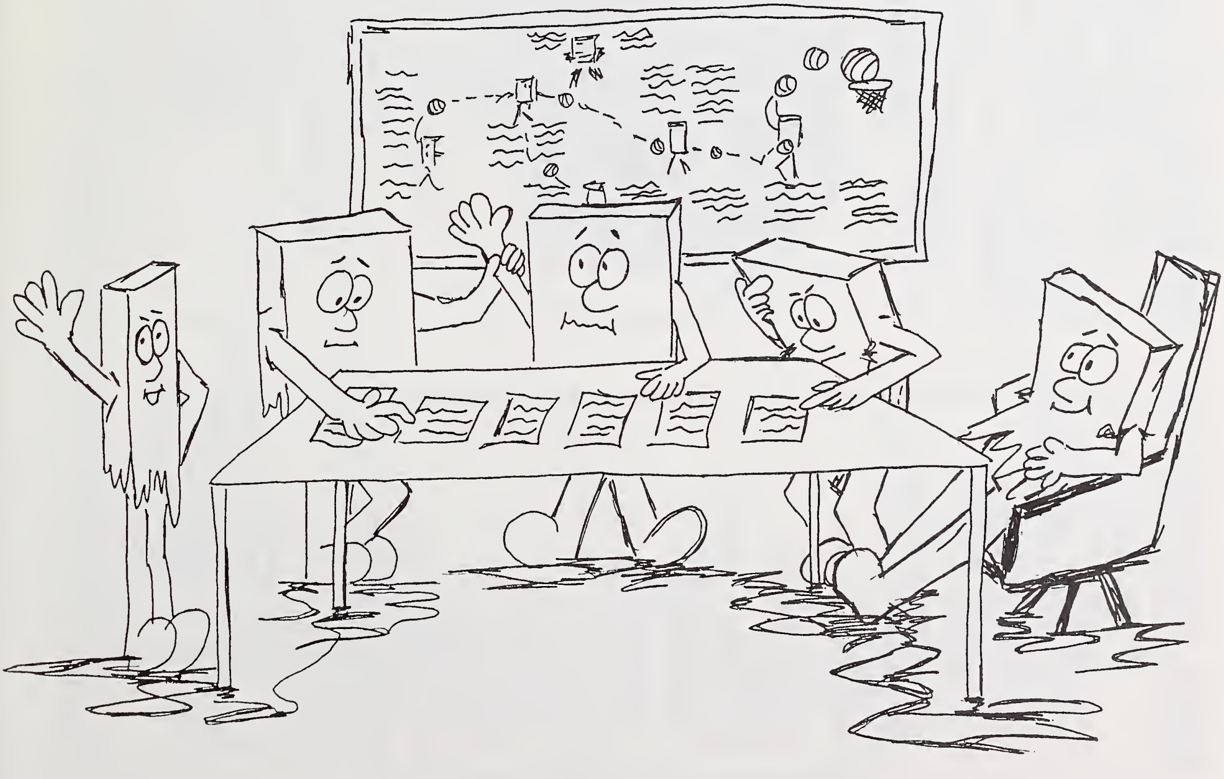
10. Each student should determine, for every career in their zone, who they do business with directly and who they use information from.

## DISCUSSION QUESTIONS

1. How many jobs are involved in making a final store shelf food in your product group?
2. Which careers in your group are most interesting?
3. Which career would you enjoy least?

## RELATED ACTIVITIES

1. Have each group present their findings to the rest of the class.
2. Have students choose one career and investigate its salary, working conditions and entry requirements.



# BEEF PRODUCTION SYSTEM -- 1

## SUPPLIERS

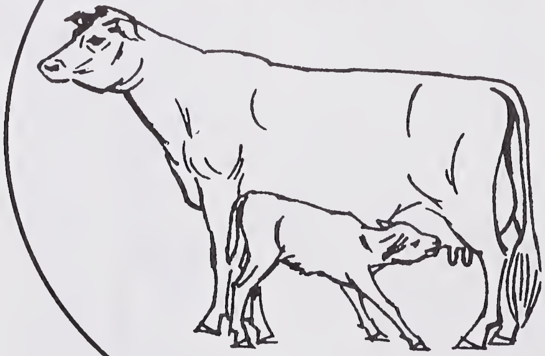
- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- feed laboratory technician
- feed transporter
- veterinarian
- building supplies sales representative
- artificial inseminator
- auctioneer
- farm machinery mechanic
- farm machinery parts salesperson

## INSPECTION AND REGULATION

- meat grader/inspector
- administrator marketing board
- brand inspector

## PRODUCER

**cow-calf operator**



## PROCESSING

- feedlot operator
- auctioneer
- sales representative
- trucker/transporter
- meat packing plant butcher
- meat packing plant packager

## MARKETING

- retail store owner
- sales representative
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- geneticist
- animal health technologist
- agricultural engineer
- animal scientist
- agricultural economist
- food scientist
- rural sociologist
- information officer
- statistician
- biologist
- chemist (agricultural)
- consultant
- anatomist
- home economist
- agricultural administrator/ government department

# BEEF PRODUCTION SYSTEM -- 2

## SUPPLIERS

silage bag producer
management consultant
grain farmer
cow-calf operator
bank manager
loans officer/credit officer
farm accountant
farm equipment and supplies sales representative
feed laboratory technician
feed transporter
veterinarian
building supplies sales representative
auctioneer
farm machinery mechanic
farm machinery parts salesperson

## INSPECTION AND REGULATION

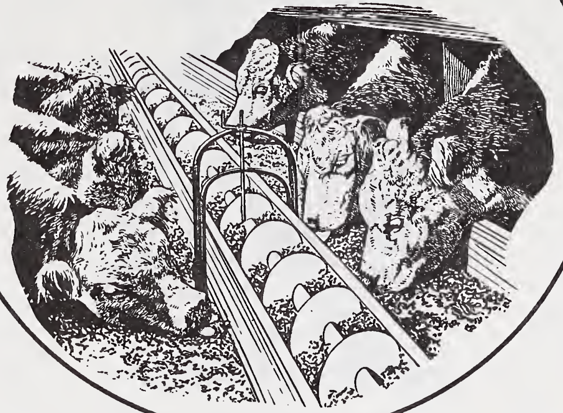
meat grader/inspector
administrator marketing board
brand inspector

## PROCESSING

livestock buyer (slaughter house)
meat packing plant
butcher
meat packing plant packager
sales representative
trucker/transporter

## PRODUCER

**feedlot operator**



## MARKETING

retail store owner
sales representative
advertising sales agent
journalist
farm reporter (media)
instructor/teacher

## RESEARCH AND DEVELOPMENT

home economist
geneticist
animal health technologist
agricultural engineer
animal scientist
agricultural economist
food scientist
rural sociologist
information officer
statistician
agricultural administrator/ government department
veterinarian
architect/draftsperson (building)
district agriculturist
regional specialist
biologist
anatomist
chemist (agricultural)
consultant

# SHEEP AND LAMB PRODUCTION SYSTEM

## SUPPLIERS

- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- veterinarian
- building supplies sales representative
- feed laboratory technician
- feed transporter
- artificial inseminator
- auctioneer
- farm machinery mechanic
- farm machinery parts salesperson

## INSPECTION AND REGULATION

- meat grader/inspector
- administrator marketing board
- brand inspector

## PRODUCER

**sheep farmer**

## PROCESSING

- trucker/transporter
- livestock buyer (slaughter house)
- sheep shearer
- meat packing plant butcher
- meat packing plant packager
- auctioneer
- sales representative
- woolen mill

## MARKETING

- retail store owner
- sales representative
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- anatomist
- agricultural engineer
- animal scientist
- agricultural economist
- food scientist
- rural sociologist
- information officer
- statistician
- veterinarian
- architect/draftsperson (buildings)
- district agriculturist
- biologist
- geneticist
- agricultural administrator/ government department
- animal health technologist
- regional specialist
- chemist (agricultural)
- home economist
- consultant

# DAIRY PRODUCTION SYSTEM

## SUPPLIERS

bank manager
loans officer/credit officer
silage bag producer
farm accountant
management consultant
farm equipment and supplies sales representative
veterinarian
building supplies sales representative
artificial inseminator
auctioneer
farm machinery mechanic
farm machinery parts salesperson
feed/flour miller
heating and ventilation equipment sales rep.
dairy herd improvement consultant

## INSPECTION AND REGULATION

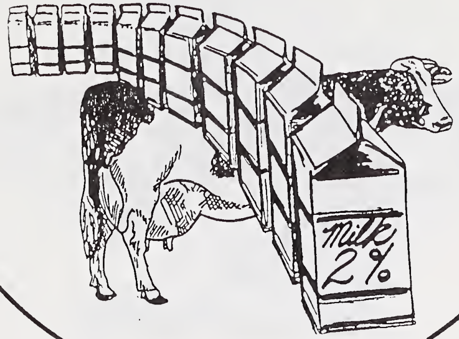
administrator marketing board
brand inspector
health inspector

## PROCESSING

dairy product manufacturer
milk processing plant operator
sales representative
trucker/transporter

## PRODUCER

**dairy farmer**



## MARKETING

retail store owner
sales representative
advertising sales agent
journalist
farm reporter (media)
instructor/teacher

## RESEARCH AND DEVELOPMENT

geneticist
agricultural engineer
agricultural economist
food scientist
rural sociologist
statistician

biologist
anatomist
home economist
agricultural administrator/ government department
architect/draftsperson (buildings)

district agriculturist
chemist (agricultural)
regional specialist
information officer
consultant
animal health technologist

# PORK PRODUCTION SYSTEM

## SUPPLIERS

- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- veterinarian
- building supplies sales representative
- feed laboratory technician
- feed transporter
- artificial inseminator
- auctioneer
- farm machinery mechanic
- farm machinery parts salesperson

## INSPECTION AND REGULATION

- meat grader/inspector
- administrator marketing board
- brand inspector

## PROCESSING

- livestock buyer (slaughter house)
- meat packing plant butcher
- meat packing plant packager
- sales representative
- trucker/transporter

## PRODUCER

**pork producer**

## MARKETING

- retail store owner
- sales representative
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- anatomist
- agricultural engineer
- animal scientist
- agricultural economist
- food scientist
- rural sociologist
- information officer
- statistician
- veterinarian
- architect/draftsperson (buildings)
- district agriculturist
- animal health technologist
- geneticist
- biologist
- regional specialist
- agricultural administrator/ government department
- chemist (agricultural)
- consultant
- home economist

# HORSE PRODUCTION SYSTEM

## SUPPLIERS

- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- veterinarian
- building supplies sales representative
- artificial inseminator
- feed laboratory technician
- feed transporter
- auctioneer
- farm machinery mechanic
- farm machinery parts salesperson
- farrier (horseshoer)
- auctioneer

## INSPECTION AND REGULATION

- brand inspector
- health inspector

## PROCESSING

- horse jockey
- sales representative
- meat packaging plant packager
- slaughter house personnel
- trucker/transporter

## PRODUCER

**rancher**

## MARKETING

- sales representative
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- agricultural engineer
- animal scientist
- agricultural economist
- rural sociologist
- information officer
- statistician
- veterinarian
- anatomist
- architect/draftsperson (buildings)
- district agriculturist
- animal health technologist
- geneticist
- biologist
- regional specialist
- chemist (agricultural)
- consultant
- home economist
- agricultural administrator/ government department

# BROILER PRODUCTION SYSTEM

## SUPPLIERS

bank manager
loans officer/credit officer
farm accountant
management consultant
farm equipment and supplies
    sales representative
feed laboratory technician
veterinarian
building supplies sales
    representative
hatchery operator
farm machinery mechanic
farm machinery parts
    salesperson
heating and ventilation
    equipment sales
    representative
feed transporter

## INSPECTION AND REGULATION

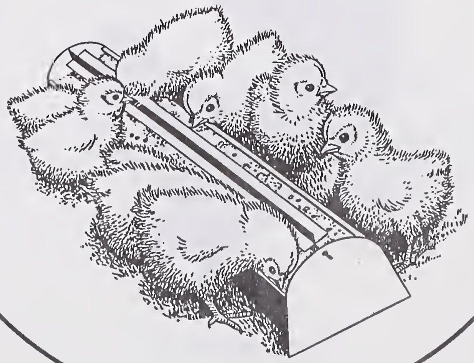
poultry inspector

## PROCESSING

meat packing plant
    butcher
meat packing plant
    packager
trucker/transporter
sales representative

## PRODUCER

**broiler producer**



## MARKETING

retail store owner
sales representative
advertising sales agent
journalist
farm reporter (media)
instructor/teacher

## RESEARCH AND DEVELOPMENT

home economist
anatomist
geneticist
agricultural administrator/
    government department
agricultural economist

agricultural engineer
animal scientist
food scientist
rural sociologist
information officer
statistician

veterinarian
architect/draftsperson (buildings)
district agriculturist
regional specialist
biologist
chemist (agricultural)

# EGG PRODUCTION SYSTEM

## SUPPLIERS

- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- feed laboratory technician
- veterinarian
- building supplies sales representative
- heating and ventilation equipment sales rep.
- hatchery manager
- farm machinery mechanic
- farm machinery parts salesperson
- feed transporter

## INSPECTION AND REGULATION

- poultry inspector

## PROCESSING

- hatchery operator
- sales representative
- trucker/transporter

## PRODUCER

**egg producer**

## MARKETING

- retail store owner
- sales representative
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- anatomist
- geneticist
- agricultural administrator/ government department
- agricultural economist
- agricultural engineer
- animal scientist
- food scientist
- rural sociologist
- information officer
- biologist
- statistician
- veterinarian
- architect/draftsperson (buildings)
- chemist (agricultural)
- consultant
- home economist
- district agriculturist
- regional specialist

# TURKEY PRODUCTION SYSTEM

## SUPPLIERS

bank manager
loans officer/credit officer
farm accountant
management consultant
farm equipment and supplies
  sales representative
feed laboratory technician
veterinarian
building supplies sales
  representative
hatchery operator
farm machinery mechanic
farm machinery parts
  salesperson
heating and ventilation
  equipment sales rep.
feed transporter

## INSPECTION AND REGULATION

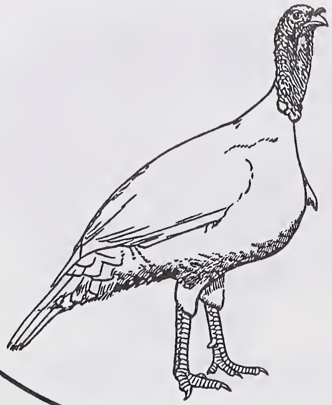
poultry inspector

## PROCESSING

meat packing plant
  butcher
meat packing plant
  packager
trucker/transporter
sales representative

## PRODUCER

**turkey producer**



## MARKETING

retail store owner
sales representative
advertising sales agent
journalist
farm reporter (media)
instructor/teacher

## RESEARCH AND DEVELOPMENT

agricultural economist
agricultural engineer
agricultural administrator/
  government department
animal scientist
food scientist

rural sociologist
information officer
statistician
veterinarian
architect/draftsperson
  (buildings)

district agriculturist
regional specialist
biologist
anatomist
geneticist
chemist (agricultural)

consultant
home economist

# FUR FARMING SYSTEM

## SUPPLIERS

- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- building supplies sales representative
- carpenter
- lab technician (feed)
- veterinarian
- heating and ventilation supplies sales rep.
- feed transporter
- artificial inseminator

## INSPECTION AND REGULATION

- health inspector

## PROCESSING

- packing plant skinner
- trucker/transporter

## PRODUCER

**fur farmer**

## MARKETING

- sales representative
- retail store owner
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- animal health technologist
- agricultural engineer
- animal scientist
- agricultural economist
- rural sociologist
- information officer
- statistician
- veterinarian
- architect/draftsperson (buildings)
- district agriculturist
- regional specialist
- geneticist
- chemist (agricultural)
- anatomist
- consultant
- agricultural administrator/ government department
- biologist

# HONEY PRODUCTION SYSTEM

## SUPPLIERS

bank manager
loans officer/credit officer
farm accountant
management consultant
farm equipment and supplies sales representative
carpenter
building supplies sales representative
veterinarian
pedigreed bee supplier

## INSPECTION AND REGULATION

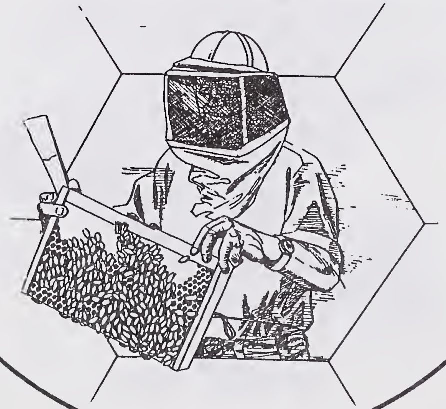
honey grader/inspector

## PROCESSING

beekeeper (apiarist)
(private packaging)
processing plant operator
trucker/transporter

## PRODUCER

**beekeeper (apiarist)**



## MARKETING

retail store owner
sales representative
advertising sales agent
journalist
farm reporter (media)
instructor/teacher

## RESEARCH AND DEVELOPMENT

anatomist
biologist
geneticist
agricultural economist
agricultural engineer
food scientist
rural sociologist
climatologist
statistician
architect/draftsperson (buildings)
chemist (agricultural)
consultant
home economist
agricultural administrator/ government department
entomologist
regional specialist
information officer

# GRAIN PRODUCTION SYSTEM

## SUPPLIERS

bank manager
loans officer/credit officer
farm accountant
management consultant
farm equipment and supplies sales representative
building supplies sales representative
land appraiser/assessor
irrigator
custom applicator (fertilizer/pesticide)
custom operator (field work)
fertilizer/chemical sales representative
municipal fieldman
lab technician (seed tester)
farm machinery mechanic
farm machinery parts salesperson
seed cleaning technician
pedigreed seed grower

## INSPECTION AND REGULATION

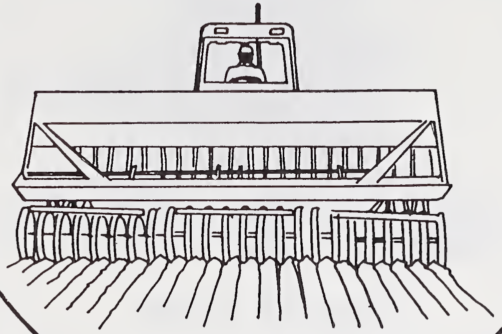
grain inspector
administrator marketing board

## PROCESSING

grain elevator manager
feed/flour miller
sales representative
trucker/transporter

## PRODUCER

**grain farmer**



## MARKETING

retail store owner
sales representative
advertising sales agent
journalist
farm reporter (media)
instructor/teacher

## RESEARCH AND DEVELOPMENT

surveyor
agronomist/plant scientist
agricultural economist
agricultural engineer
food scientist
agricultural administrator/government department
rural sociologist
statistician
botanist
climatologist
architect/draftsperson (building)
district agriculturist
home economist
geneticist
chemist (agricultural)
biologist
consultant
entomologist
regional specialist
information officer

# GRAIN SEED PRODUCTION SYSTEM

## SUPPLIERS

- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- building supplies sales representative
- land appraiser/assessor
- irrigator
- custom applicator (fertilizer/pesticides)
- custom operator (field work)
- fertilizer/chemical sales representative
- municipal fieldman
- lab technician (seed tester)
- farm machinery mechanic
- farm machinery parts salesperson
- seed cleaning technician

## INSPECTION AND REGULATION

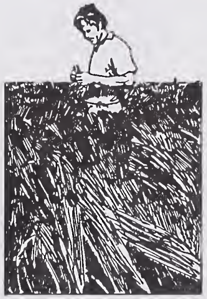
- grain inspector

## PROCESSING

- commercial grain farmer
- grain elevator manager
- feed/flour miller
- sales representative
- trucker/transporter

## PRODUCER

**pedigreed grain seed grower**



## MARKETING

- retail store owner
- sales representative
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- surveyor
- agronomist/plant scientist
- geneticist
- agricultural administrator/ government department
- agricultural economist
- agricultural engineer
- food scientist
- rural sociologist
- statistician
- architect/draftsperson (building and landscape)
- district agriculturist
- chemist (agricultural)
- consultant
- botanist
- entomologist
- climatologist
- regional specialist
- information officer
- home economist
- biologist

# FORAGE PRODUCTION SYSTEM

## SUPPLIERS

- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- forage seed producer
- building supplies sales representative
- land appraiser/assessor
- irrigator
- custom applicator (fertilizer/pesticide)
- custom operator (field work)
- fertilizer/chemical sales representative
- municipal fieldman
- lab technician (seed tester)
- farm machinery mechanic
- farm machinery parts salesperson

## INSPECTION AND REGULATION

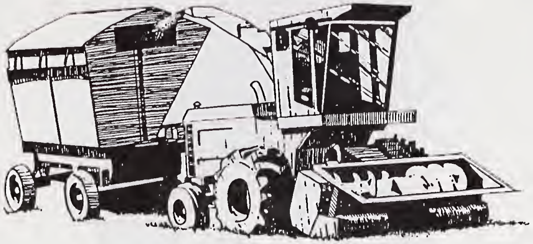
- plant product inspector

## PROCESSING

- alfalfa (dehydrated) packing plant operator
- sales representative
- feed laboratory technician
- trucker/transporter

## PRODUCER

**forage producer**



## MARKETING

- feedlot operator
- livestock farmer
- retail store owner
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- geneticist
- climatologist
- botanist
- agricultural economist
- agricultural engineer
- agricultural administrator/ government department
- food scientist
- rural sociologist
- statistician
- agronomist/plant scientist
- architect/draftsperson (landscape/building)
- chemist (agricultural)
- information officer
- consultant
- district agriculturist
- regional specialist
- biologist
- entomologist
- surveyor
- home economist

# FORAGE SEED PRODUCTION SYSTEM

## SUPPLIERS

- bank manager
- loans officer/credit officer
- farm accountant
- management consultant
- farm equipment and supplies sales representative
- building supplies sales representative
- land appraiser/assessor
- irrigator
- custom applicator (fertilizer/pesticide)
- custom operator (field work)
- fertilizer/chemical sales representative
- municipal fieldman
- lab technician (seed tester)
- farm machinery mechanic
- farm machinery parts salesperson

## INSPECTION AND REGULATION

- grain inspector

## PROCESSING

- seed cleaning technician
- seed packing plant operator
- sales representative
- trucker/transporter

## PRODUCER

**forage seed producer**

## MARKETING

- retail store owner
- forage producer
- advertising sales agent
- journalist
- farm reporter (media)
- instructor/teacher

## RESEARCH AND DEVELOPMENT

- home economist
- food scientist
- climatologist
- agricultural administrator/ government department
- agricultural economist
- agricultural engineer
- rural sociologist
- statistician
- botanist
- chemist (agricultural)
- architect/draftsperson (building/landscape)
- chemist (agricultural)
- district agriculturist
- biologist
- consultant
- surveyor
- geneticist
- agronomist/plant scientist
- regional specialist
- information officer

# TREE HEALTH MAINTENANCE SYSTEM

## SUPPLIERS

bank manager
loans officer/credit officer
farm equipment and supplies sales representative
landscape gardener
pedigreed seed grower
greenhouse operator
irrigator
fertilizer/chemical sales representative
custom applicator (fertilizer/pesticide)
lab technician (seed tester)
farm machinery mechanic
farm machinery parts salesperson

## INSPECTION AND REGULATION

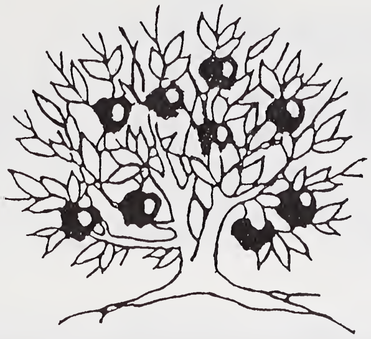
plant product inspector

## PROCESSING

arborist (tree expert)
sales representative
accountant

## PRODUCER

**arborist (tree expert)**



## MARKETING

sales representative
advertising sales agent
journalist
farm reporter (media)
instructor/teacher

## RESEARCH AND DEVELOPMENT

statistician
horticulturist
home economist
agricultural economist
agronomist/plant scientist
rural sociologist

district agriculturist
chemist (agricultural)
architect/draftsperson (landscape)
consultant
anatomist

climatologist
botanist
geneticist
information officer
agricultural administrator/government department

entomologist
biologist
surveyor
regional specialist

# FRUIT & VEGETABLE PRODUCTION SYSTEM -- 1

## SUPPLIERS

bank manager
loans officer/credit officer
farm accountant
management consultant
gardener
greenhouse operator
farm equipment and supplies
    sales representative
pedigreed seed grower
building supplies sales
    representative
land appraiser/assessor
irrigator
agricultural pilot
    (aerial applicator)
custom operator (field work)
fertilizer/chemical sales
    representative
municipal fieldman
lab technician (seed tester)
farm machinery mechanic
farm machinery parts
    salesperson

## INSPECTION AND REGULATION

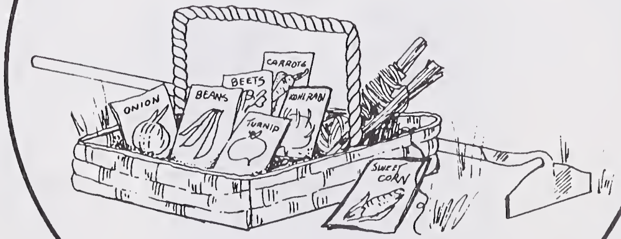
fruit and vegetable inspector

## PROCESSING

canning and freezing
    plant manager
mechanic
home economist
engineer
horticulturist
accountant
sales representative

## PRODUCER

**fruit/vegetable grower**



## MARKETING

retail store owner
sales representative
advertising sales agent
journalist
farm reporter (media)
Instructor/teacher

## RESEARCH AND DEVELOPMENT

information officer
agricultural economist
agricultural engineer
agricultural administrator/
    government department
food scientist
climatologist
rural sociologist
botanist
statistician
geneticist
agronomist/plant scientist
architect/draftsperson
    (building/landscape)
surveyor
district agriculturist
chemist (agricultural)
home economist
consultant
entomologist
biologist
regional specialist

# FRUIT & VEGETABLE PRODUCTION SYSTEM -- 2

## SUPPLIERS

bank manager
loans officer/credit officer
farm accountant
management consultant
farm equipment and supplies sales representative
pedigreed seed grower
carpenter
building supplies sales representative
land appraiser/assessor
irrigator
custom applicator (fertilizer/pesticide)
custom operator (field work)
fertilizer/chemical sales representative
lab technician (seed tester)
farm machinery mechanic
farm machinery parts salesperson

## INSPECTION AND REGULATION

plant product inspector
fruit and vegetable inspector

## PROCESSING

market gardener
packaging machine operator
trucker/transporter

## PRODUCER

**market gardener**

## MARKETING

instructor/teacher
farm reporter (media)
farmers' market manager
wholesale manager
sales representative
advertising sales agent
journalist
retail store owner

## RESEARCH AND DEVELOPMENT

botanist
climatologist
home economist
agricultural economist
food scientist
rural sociologist
geneticist
architect/draftsperson (landscape)
chemist (agricultural)
agronomist/plant scientist
consultant
agricultural administrator/ government department
entomologist
surveyor
regional specialist
information officer

# HORTICULTURE PRODUCTION SYSTEM

## SUPPLIERS

architect/draftsperson (building/landscape)
bank manager
building supplies sales representative
carpenter
farm accountant
farm equipment and supplies sales representative
fertilizer/chemical sales representative
heating and ventilation equipment sales rep.
laboratory technician (seed tester)
landscape gardener
loans officer/credit officer
management consultant
irrigator

## INSPECTION AND REGULATION

plant product inspector
health inspector

## PROCESSING

greenhouse operator
packaging machine operator
trucker/transporter

## PRODUCER

**greenhouse operator**

## MARKETING

greenhouse operator
farm reporter (media)
journalist
advertising sales agent
instructor/teacher
retail store owner
sales representative

## RESEARCH AND DEVELOPMENT

statistician
surveyor
agricultural administrator/ government department
agricultural economist
agricultural engineer
agronomist/plant scientist
architect/draftsperson (building/landscape)
biologist
botanist
chemist (agricultural)
rural sociologist
regional specialist
consultant
district agriculturist
entomologist
food scientist
geneticist
home economist
horticulturist
information officer

# PRODUCER INFORMATION SHEET 1.1

**Producer Information Sheet**

## COW-CALF BEEF PRODUCER

A cow-calf operator keeps a herd of breeding cows and sells their calves each year when they are weaned. Cow-calf operators may specialize as either commercial producers or purebred producers.

The commercial cow-calf operator sells newly weaned calves to a feedlot operator at the end of their first summer. This operation requires a basic herd of at least 200 cows to be economically feasible.

Purebred operators raise cattle of a particular breed for sale to other purebred breeders or commercial herds as breeding stock. A purebred herd requires more attention than a commercial herd; therefore it is often smaller. Purebred herds require excellent records of performance as this determines prices. A great deal of promotion is required to sell the animals, for there is great competition.

A cow-calf operator must select breeding stock; manage pasture lands; purchase or produce and store feed; maintain barns, buildings, equipment and machinery; feed and water the cattle; control disease and parasites; and evaluate marketing alternatives (packing plants, public stockyards, or rural auction markets).

**Producer Information Sheet**

## FEEDLOT BEEF PRODUCER

A feedlot operator buys calves as soon as they are weaned and feeds them until they have grown to a weight of 500 to 1000 pounds. The animals are then sold to the packing plants for slaughter. Other duties include selecting and mixing feed, delivering feed and water to the cattle, treating or getting treatment for injured or diseased cattle, and operating various machinery.

Buying and selling feeder cattle at the right times is extremely important for it can mean the difference between making or losing money.

Once sufficient skill and experience in the cow-calf operation is achieved, one can set up a feedlot operation. This operation is harder to set up on your own because of the enormous costs.

# PRODUCER INFORMATION SHEET 1.2

**Producer Information Sheet**

## SHEEP PRODUCER

Sheep can be raised virtually anywhere in Alberta. There are four basic types of sheep producer:

1. A commercial lamb producer maintains a flock of ewes and sells lambs and wool.
2. A feedlot lamb producer maintains a flock of ewes and sells their lambs to the feedlot.
3. A purebred producer supplies the sheep industry with the best parent sheep of a particular breed.
4. A crossbred ewe producer crosses breeds with superior maternal characteristics to produce the best ewes for commercial lambs.

The sheep farmer's duties include making sure there is enough feed, maintaining flock health, maintaining buildings and corrals, maintaining the cropland that produces the feed, improving the flock, through keeping records of production statistics, and marketing of the sheep, lambs and wool.

**Producer Information Sheet**

## DAIRY PRODUCER

There are two types of dairy farmer:

1. fluid milk producers -- produce milk for direct human consumption
2. manufacturing milk producers -- produce milk for use in dairy products such as ice cream and butter.

Essentially, a dairy farmer needs at least 50 cows, a milking parlor, an area to keep the cows in, and sufficient land for pasture. A potential dairy farmer must also obtain a quota (the right to sell milk) from an appropriate dairy marketing board and must be able to fill that quota at all times. This makes the cost of operation quite high.

The main duties include milking, feeding and caring for the dairy herd, breeding the cows and raising calves. If the farmer decides not to purchase feed, production and storage of crops necessary to feed their herds is included in these duties.

# PRODUCER INFORMATION SHEET 1.3

**Producer Information Sheet**

## HOG PRODUCER

Basically, hog producers can be separated into four types:

1. A farrow finisher keeps sows and raises their piglets for sale as finished hogs.
2. A farrow weaner keeps sows and sells piglets as soon as they are weaned.
3. A feeder buys newly weaned piglets to feed, and sells finished hogs for slaughter.
4. A purebred swine breeder raises swine of a particular type to sell as breeding stock to commercial swine producers .

Swine producers must work continually with their hogs. Constant attention to feeding and disease prevention is essential.

In the purebred operation, each piglet may become very valuable. Above the usual chores of a hog producer, the purebred farmer promotes the animal at shows and fairs, and keeps detailed breeding production records.

**Producer Information Sheet**

## HORSE INDUSTRY

A horse breeder will be involved with a number of activities in caring for horses. Persons employed in this industry may be involved with foaling, feeding, caring, exercising, training and general handling of horses for racing, jumping, show, recreational or work purposes.

Trainers evaluate the individual characteristics of a horse, decide on its potential for training, and set up a training program adapted for that particular horse.

Grooms and stable workers measure and mix rations, and feed and water horses according to prescribed schedules. Other duties include: inspecting the horses for sickness or injury, treating them according to veterinarians' instructions, grooming and trimming, cleaning stalls, mangers and feed troughs; cleaning and repairing riding and jumping equipment, exercising horses and assisting with breeding and foaling.

# PRODUCER INFORMATION SHEET 1.4

**Producer Information Sheet**

## BROILER PRODUCER

Broiler production involves the raising of chickens for meat. Usually, it takes seven to eight weeks for broilers to reach marketing weight. Generally, producers market 50,000 to 60,000 birds annually.

The broilers are confined to large barns 900 to 1100 square metres. Feeding and watering are done automatically. Proper ventilation and sanitation must be maintained, and the barns must be thoroughly cleaned after each flock is taken out.

Spread of disease is controlled through vaccination, medication and separation of flocks of different ages.

Broiler production is strictly controlled by marketing boards. Yet, small producers can raise up to 2000 broilers per year without requiring a quota.

**Producer Information Sheet**

## EGG PRODUCER

The egg producer ensures the steady production of top quality eggs. Flocks must be replaced on schedule and poor-producing hens culled. Balanced rations and a continuous supply of clean, fresh water should be fed to the hens and the eggs must be gathered several times a day and then refrigerated to ensure top quality.

Large egg producers keep the hens in suspended cages. Feed and water is given automatically, eggs may be gathered mechanically and automated systems may be used to clean the barns.

Usually, the flock ranges from 10,000 to 20,000 birds. A minimum flock size of 1000 should be kept in order to efficiently make use of labor. Farmers can raise up to 300 hens annually without requiring a quota.

# PRODUCER INFORMATION SHEET 1.5

**Producer Information Sheet**

## TURKEY PRODUCER

The production of turkey is very similar to broiler production. More feed and water is required and also, heavier equipment because of the larger bird being produced.

Turkey production is strictly controlled by marketing boards.

There are two classes of turkey producers:

1. heavy commercial breed -- these turkeys take 16 to 21 weeks to reach a weight of 8 to 13 kilograms.

2. light breed -- these turkeys grow 6 to 8 kilograms in 12 to 14 weeks.

Usually, a turkey producer markets 20,000 to 25,000 birds annually, if it is the only source of income. Without a quota, a farmer can raise up to 300 birds per year.

**Producer Information Sheet**

## FUR FARMER

The raising of fur-bearing animals in pens is not a large production in Alberta.

The fur farmer's duties involve building enclosures, maintaining sanitary and ventilated pens, procuring food for the meat-eating species, selecting animals to be pelted, killing and skinning, caring for hides, and eventually marketing the pelts.

Good nutrition practices and good animal husbandry are essential for a successful fur farm.

Also, being familiar with the genetic techniques that produce the best breeding stock is necessary for the fur farmer's success.

Access to cheap and abundant feed, individual pens, feed, grinding and mixing equipment and refrigeration are vital to a fur farm.

This operation can become quite costly and difficult for one person to establish. The demand and going market prices for the animal pelts must be considered.

# PRODUCER INFORMATION SHEET 1.6

**Producer Information Sheet**

## BEEKEEPER (APIARIST)

A beekeeper maintains hives of bees for the production of honey and pollination of legume and other crops. There are three levels of production:

1. hobbyists - usually up to 25 hives
2. sideline beekeepers - usually a supplement to their income with 25 - 200 hives.
3. commercial beekeepers - derive most or all their income from 200 or more hives (in Alberta, usually 1000 hives plus)

Most beekeepers start out with a small colony and eventually expand the colony to a bigger size.

Managing an apiary (collection of hives) involves maintaining specially designed hives and equipment, inspecting the colonies for parasites and disease, wintering bees or restocking hives, preventing swarming and controlling over-crowding, and extracting and preparing honey for marketing to beekeeper cooperatives, private honey packers, or directly to the consumer.

**Producer Information Sheet**

## COMMERCIAL GRAIN PRODUCER

The commercial grain farmer raises grain for human consumption or animal feeds. The principal crops in Alberta are wheat, barley, oats and rye (cereal grains) and canola and flaxseed (oilseeds).

A commercial grain producer needs a broad range of expertise. Essential skills include soil and crop management, knowledge of fertilizers-herbicides, knowledge of how to choose the best seed variety, and knowledge of repairing and servicing the variety of machines used in farming.

In a case where the production of grain is the sole income for the farmer the average grain farm would be in the range of 300 to 400 hectares (700 to 1000 acres) of cropland.

# PRODUCER INFORMATION SHEET 1.7

Producer Information Sheet

## PEDIGREED GRAIN SEED GROWER

The pedigreed grain seed grower is a specialized grain farmer who grows seed grain for sale to commercial grain farmers. The duties are similar to the commercial grain farmer, in fact, the pedigreed grain seed grower is usually an established commercial grain farmer with considerable experience.

Ensuring the seed is free of weed seeds and other grains is often the greatest challenge to a seed producer. Care in all aspects of seed production and handling is essential to ensure quality seed.

In the winter, the pedigreed seed producers must clean all their grain using special machines. The seed must be certified by a government inspector, therefore, the growers must comply with the rules and regulations of the Canada Seed Act.

Membership in the Canadian Seed Grower's Association is mandatory for pedigreed seed growers.

Producer Information Sheet

## COMMERCIAL FORAGE PRODUCER

The forage producer cultivates and seeds land into grasses and legumes which are then harvested in the green stages as hay, which is stored and sold as winter feed for livestock. If the forage producer has livestock, the forage may be used on his own farm.

There are two common types of forages.

1. grasses (such as bromegrass)

2. legumes (such as alfalfa)

Forage producers must understand soils and forages to know what type of forage will grow best on their soil, what fertilization is required to maximize returns and which weed control methods are most appropriate. A good working knowledge of the machinery is also essential.

# PRODUCER INFORMATION SHEET 1.8

**Producer Information Sheet**

## FORAGE SEED PRODUCER

Forage seed is derived from pure standards of forages which the producer allows to mature rather than harvesting as hay or silage. This seed is then sold to other forage producers who will use it to establish their forage crops.

The duties of the forage seed producer are very similar to the pedigreed grain seed grower. The crops may be sown in fall or spring and are harvested the following summer or fall. Forages are perennial crops which live for three to five years and require one season to get established.

This producer must understand soils, fertilizers, weed control, how to operate and maintain machinery and other aspects in growing forage seed.

As with the pedigreed grain seed grower, the forage producer must comply with the Canada Seeds Act in order to pass government inspection of the seed. Producers also attend exhibitions and seed fairs to promote their product.

**Producer Information Sheet**

## ARBORIST (TREE EXPERT)

An arborist's duties fall into five major categories:

1. pruning trees
2. controlling pests
3. fertilizing trees
4. cabling and bracing limbs
5. transplanting trees

Arborists treat diseased and insect-infected trees, and spray trees to prevent infestation and disease. They fertilize trees, clear brush, cable and brace large limbs to prevent splitting and breaking of branches, and install lightning protection. They also dig up trees, plant trees, and give advice on tree care. Their work is performed mainly outdoors and in all seasons of the year.

Arborists use varied tools and machinery.

Most arborists today specialize in one area of tree care and maintenance, such as pruning, planting or spraying.

# PRODUCER INFORMATION SHEET 1.9

**Producer Information Sheet**

## FRUIT/VEGETABLE PRODUCER

This producer is involved in seeding, harvesting and hauling vegetables from the farm to the processing plant. These fruits and vegetables are grown at a much larger capacity than that of the market gardener. The end result of the produce is to be processed and sold to the consumer at the regular grocery store.

On the assembly line, at the processing plant, the employees will run machines that clean, wash, sort, trim, peel and cut vegetables, and blanch feed products; fill, close and seal containers; cook and cool the packaged products, apply labels, pack shipping cases, and prepare for storage.

Many varied occupations are involved in this production, both skilled and professional personnel.

People entering this industry start as unskilled labourers, are trained in the operation of certain simple machines and then move up to more complex operations.

**Producer Information Sheet**

## MARKET GARDENER

Market gardening is growing vegetables and fruits on a field scale and then selling the produce through such outlets as Farmers' Market, gate sales, "pick your own" and wholesale. Many varieties of vegetables may be grown, and the gardener must have knowledge of the treatment for each type.

The market gardener should know the basics of gardening such as soil and climatic conditions; nutritional requirements; weed, disease and insect problems, and planting and harvesting techniques.

For the market gardener, a lot of tedious and physically demanding work is required. Long and irregular hours are common.

A full-time market gardener usually uses 25 to 50 hectares (60 to 120 acres) of land. However, market gardens in Alberta range from large backyard gardens to those that are approximately 50 hectares (120 acres).

# PRODUCER INFORMATION SHEET 1.10

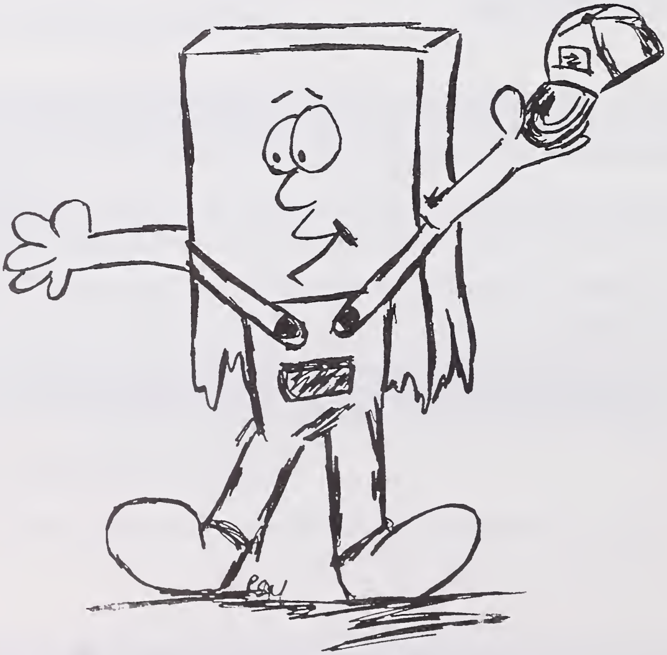
**Producer Information Sheet**

## GREENHOUSE OPERATOR

A greenhouse operator plants, cultivates and harvests trees, shrubs, ornamentals, flowering plants and vegetables in fields or associated greenhouses.

Greenhouses can be established in either rural or urban areas. They can either sell to wholesalers or have their own retail outlets.

Operating a greenhouse depends on knowing the life cycle and responses of all the plants grown. An operator must be able to propagate plants by seeds or cuttings, prune them to accepted forms, maintain soil nutrients, identify and counteract pests, transplant and transport plant stock. If they wish to produce flowering, potted plants they must also know and be able to produce conditions that will stimulate bud formation.



# SUPPLIERS

SUPPLIERS

## Agricultural Pilot (Aerial Applicator)

**Location:** Outdoor
**Work Conditions:** Mainly rural setting
**Activities:** An agricultural pilot mixes fertilizers, herbicides & pesticides, loads mixtures into an airplane in preparation for dusting, or spraying operations, and sprays or dusts the mixtures onto the cropland.
**Requirements:** Six week certification in pesticide application at a community college, plus the equivalent of a Canadian Commercial Pilot's license.

SUPPLIERS

## Auctioneer

**Location:** Outdoor/indoor
**Work Conditions:** Rural setting (mainly)
**Activities:** An auctioneer sells property or merchandise such as real estate, furniture, livestock, machinery & art objects at an auction. The auctioneer will appraise the value of these objects beforehand. The auctioneer will then describe the object to the audience & ask for bids, selling to the highest bidder.
**Requirements:** License from a technological school or community college.

SUPPLIERS

## Artificial Inseminator

**Location:** Outdoor/indoor
**Work Conditions:** Rural setting
**Activities:** The artificial inseminator may collect & package semen for the artificial breeding of animals. Prepared semen is injected into the vagina of the females to breed them.
**Requirements:** Course from a community college and on-the-job training.

SUPPLIERS

## Bank Manager

**Location:** Indoors
**Work Conditions:** Urban/town setting; office
**Activities:** The banker supervises and coordinates the activities of clerical staff concerned with finance and banking. Also, establishes consumer finance programs and sells financial services to businesses.
**Requirements:** Graduation from a university program (probably bachelor of commerce); preferably a post-graduate degree - ten years of experience in previous managerial or supervisory situation.

# SUPPLIERS

SUPPLIERS

### Building Supplies Sales Representative

Location: Indoors mainly
Work Conditions: Urban/rural setting
Activities: This sales representative sells building supplies needed for the construction of farm buildings. Advises customers on building and home repair problems and estimates quantity of material needed.
Requirements: 10 to 12 years of general education and from 3 months to 1 year of on-the-job training.

SUPPLIERS

### Cow-Calf Operator

**Location:** Outdoor mainly
**Work Conditions:** Rural setting, farm
**Activities:** A cow-calf operator raises a herd of breeding cows and sells their calves each year when they are weaned. They can either be commercial or purebred producers.
**Requirements:** 10 to 12 years of general education plus 2 years or more in an agricultural program in a community college or university, or 2 to 6 years of on-the-job training, or practical experience gained through farm upbringing.

SUPPLIERS

### Carpenter (Construction)

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural setting
**Activities:** A carpenter constructs, erects, installs and repairs structures & fixtures of wood, plywood, & wallboard. (uses hand and power tools and complies with local building codes)
**Requirements:** Tradesman diploma from a technological post-secondary school. Apprenticeship program possibly. Completion of provincial certification requirements.

SUPPLIERS

### Custom Applicator (Fertilizers/Pesticides)

**Location:** Outdoor mainly
**Work Conditions:** Rural setting, farm
**Activities:** A custom applicator mixes fertilizers, herbicides & pesticides, & loads the mixture into a spraying tank. The custom applicator then applies the mixtures with farm spraying machinery.
**Requirements:** 10 to 12 years general education. Farm upbringing, or from 3 months to 2 years of on-the-job training or community college program.

# SUPPLIERS

SUPPLIERS

### Custom Operator (Fieldwork)

**Location:** Outdoor
**Work Conditions:** Rural setting
**Activities:** The custom operator operates tractor-drawn or self-propelled farm machinery to plant, cultivate and harvest crops. This operator may provide custom operating services or operate a particular type of farm equipment on a contract basis.
**Requirements:** 10 to 12 years general education. Farm upbringing, or from 3 months to 2 years of on-the-job training or community college program.

SUPPLIERS

### Farm Accountant

**Location:** Indoor
**Work Conditions:** Office, town/rural setting
**Activities:** A farm accountant plans & administers accounting systems to provide records of assets, liabilities & financial transactions. This person also advises on accounting problems.
**Requirements:** Bachelor of Commerce degree with specialization in accounting plus an articling period.

SUPPLIERS

### Dairy Herd Improvement Consultant

**Location:** Indoor
**Work Conditions:** Urban/rural; involves field trips
**Activities:** A dairy herd improvement consultant evaluates & recommends improvements to the dairy producer. Analyzing data, devising tests, preparing reports & documents, and assisting in implementing the improvements are all a part of a consultant's career.
**Requirements:** Bachelor's degree in agricultural science.

SUPPLIERS

### Farm Equipment Supplies Sales Representative

**Location:** Indoor mainly
**Work Conditions:** Urban/rural setting
**Activities:** A farm equipment & supplies sales representative sells agricultural machinery, equipment & supplies such as tractors, combines, milking machines, tools, fertilizers, & feeds, etc.
**Requirements:** 10 to 12 years of general education and from 3 months to 1 year of on-the-job training.

# SUPPLIERS

SUPPLIERS

## Farm Machinery Mechanic

**Location:** Indoor/outdoor
**Work Conditions:** Rural/town setting, garage
**Activities:** A farm machinery mechanic repairs & overhauls farm machinery, such as combines, tractors, movers, or other equipment. This type of mechanic may also assemble new farm machinery and equipment.
**Requirements:** Trade certificate from a technological school or apprenticeship program or community college specializing in agricultural mechanic program.

SUPPLIERS

## Farrier (horseshoer)

**Location:** Indoor/outdoor
**Work Conditions:** Rural setting
**Activities:** A farrier shapes, fits and nails horseshoes to horses' hooves.
**Requirements:** A diploma program from a community college specializing in farrier science or farm upbringing experience.

SUPPLIERS

## Farm Machinery Parts Salesperson

**Location:** Indoor
**Work Conditions:** Urban/town setting, agency, repair shops or parts store.
**Activities:** A farm machinery parts salesperson sells spare & replacement parts for farm machinery & equipment. One would order, receive & store parts in a stockroom according to a prearranged system, then read the catalogue to determine stock number & price of the part sold.
**Requirements:** Trade certificate from a technological school on apprenticeship program or a community college specializing in agricultural mechanic program.

SUPPLIERS

## Feed/Flour Miller

**Location:** Indoor
**Work Conditions:** Rural/urban setting
**Activities:** A feed & flour miller operates grinding & mixing machines & other equipment to process & bag custom lots of animal & poultry feed, flour, or meal according to specifications.
**Requirements:** 9 or 10 years of general education. Up to 3 years of combined experience and on-the-job training.

# SUPPLIERS

SUPPLIERS

## Feed Laboratory Technician

**Location:** Indoor
**Work Conditions:** Rural/urban setting; lab work
**Activities:** A feed laboratory technician tends to the machines that clean, grind & sift small quantities of grain to prepare samples of flour for laboratory testing and records identifying data & weight.
**Requirements:** Secondary school education & graduation from a community college program of about 2 years in physical sciences & up to 2 years of experience on-the-job.
**Or** 4 years of on-the-job training supplemented by self-study in physical sciences.

SUPPLIERS

## Fertilizer/Chemical Sales Representative

**Location:** Indoors mainly
**Work Conditions:** Rural/town setting
**Activities:** A fertilizer/chemical sales representative sells agricultural chemicals, chemical products, & fertilizers to farmers. Also, advises on problems and suggests quantities needed for each situation.
**Requirements:** 10 to 12 years of general education and from 3 months to 1 year of on-the-job training.

SUPPLIERS

## Feed Transporter

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural; mainly truck transport
**Activities:** Generally, a feed transporter operates gasoline or diesel powered tractor-trailer combinations to transport feed.
**Requirements:** 7 to 11 years of general education. 1 to 6 months of on-the-job training. 1 year of previous driving experience & a good driving record. - completion of test & examination requirements.

SUPPLIERS

## Forage Seed Producer

**Location:** Outdoors mainly
**Work Conditions:** Rural
**Activities:** A forage seed producer derives the seed from forage crops which are allowed to mature rather than being harvested for feed. Once the seed is ready, it is sold to other forage producers who will use it to establish their forage crops.
**Requirements:** 10 to 12 years of general education, plus 2 years or more in an agricultural program at a community college or university or, 2 to 6 years of on-the-job training, or practical experience gained through farm upbringing.

# SUPPLIERS

SUPPLIERS

## Grain Farmer

**Location:** Outdoors mainly
**Work Conditions:** Rural setting, farm
**Activities:** A grain farmer cultivates & seeds land to produce one or more grain crops, such as wheat, barley or oats, for human consumption or animal feeds.
**Requirements:** 10 to 12 years of general education plus, 2 years or more in an agricultural program in a community college or university; or 2 to 6 years of on-the-job training, or practical experience gained through farm upbringing.

SUPPLIERS

## Hatchery Operator

**Location:** Indoor
**Work Conditions:** Urban/town setting; hatchery
**Activities:** A hatchery operator manages poultry hatching: arranges for a supply of hatching eggs, schedules hatching dates, plans advertising & sales programs, purchases supplies, provides advice to customers.
**Requirements:** 12 to 13 years of general education; a 2 year diploma program in a college, offering courses in agricultural production & management - 2 to 4 years of related experience at the foreman or assistant manager level.

SUPPLIERS

## Greenhouse Operator

**Location:** Indoor/outdoor
**Work Conditions:** Rural/urban setting; greenhouse
**Activities:** A greenhouse operator plants, cultivates and harvests trees, shrubs, ornamentals, flowering plants, and vegetables in a nursery or associated greenhouse. Also skilled in running a business to satisfy consumer needs.
**Requirements:** 12 to 13 years of general education or a 2 year program in a college offering courses in agricultural production & management - 2 to 4 years of related experience at the foreman or assistant manager level.

SUPPLIERS

## Heating and Ventilation Equipment Sales Representative

**Location:** Indoors mainly
**Work Conditions:** Urban/town setting
**Activities:** This sales representative sells heating & ventilation equipment necessary on a poultry, cattle, sheep, hog, or other farm establishments.
**Requirements:** 10 to 12 years of general education and from 3 months to 1 year of on-the-job training.

# SUPPLIERS

SUPPLIERS

### Irrigator

**Location:** Outdoor
**Work Conditions:** Rural setting (mainly)
**Activities:** An irrigator irrigates row & field crops by ditch irrigation, portable sprinkler system or the wheel-line system.
**Requirements:** 6 to 8 years general education - a short demonstration up to 1 month's experience to acquire a job proficiency.

SUPPLIERS

### Land Appraiser/Assessor

**Location:** Indoor/outdoor
**Work Conditions:** Town/rural setting
**Activities:** The land appraiser estimates market price for market value to the owner.
**Requirements:** A two year diploma from a regional college program recognized by the Alberta Assessors Association.

SUPPLIERS

### Lab Technician (Seed Tester)

**Location:** Indoor
**Work Conditions:** Urban/town setting - lab. work
**Activities:** A seed tester/lab technician carries out a limited number of technical functions in chemistry to determine the quality of the seed grown.
**Requirements:** Secondary school education and graduation from a community college program of about 2 years in physical sciences and up to 2 years of on-the-job experience.
Or 4 years of on-the-job training supplemented by self-study in physical sciences.

SUPPLIERS

### Landscape Gardener

**Location:** Outdoors mainly
**Work Conditions:** Rural/urban setting
**Activities:** The landscape gardener works from pre-arranged design plans to carry out landscaping operations. There may be supervisory positions also available. A vast array of machinery & equipment is used by a landscape gardener.
**Requirements:** On-the-job training from landscape contractors, nursery managers or other horticultural specialists - 2 year diploma program available in technical school or community college.

# SUPPLIERS

SUPPLIERS

## Loans Officer (Credit Officer)

**Location:** Indoor
**Work Conditions:** Urban/town setting; bank
**Activities:** A loans officer examines, evaluates & processes applications for credit or loans & authorizes or recommends their approval.
**Requirements:** Degree in Agriculture or Commerce, coupled with several years related experience in agricultural lending/agricultural financial management.

SUPPLIERS

## Municipal Fieldman

**Location:** Indoor/outdoor
**Work Conditions:** Rural/town setting; some office work
**Activities:** A municipal fieldman advises farmers on the general care of animals & poultry, crops, nutrition, disease prevention and care.
**Requirements:** Bachelor's degree in agricultural science, plus 2 to 4 years on-the-job training.

SUPPLIERS

## Management Consultant

**Location:** Indoor
**Work Conditions:** Urban/town setting; office
**Activities:** A management consultant evaluates and recommends improvements in farm management. Analyzing data, devising tests, preparing reports & documents, and assisting in implementing the improvements are part of the job.
**Requirements:** Bachelor's degree in commerce or agricultural science, preferably a master's degree also.

SUPPLIERS

## Pedigreed Seed Grower

**Location:** Outdoors mainly
**Work Conditions:** Rural setting; farm
**Activities:** The pedigreed grain seed grower is a specialized farmer that grows seed grain for sale to commercial grain farmers. The growers must comply with the regulations of the Canada Seed Act.
**Requirements:** 10 to 12 years of general education, plus 2 years or more in an agricultural program in a community college or university; or 2 to 6 years of on-the-job training or practical experience gained through farm upbringing.

# PROCESSING

PROCESSING

### Accountant

**Location:** Indoor
**Work Conditions:** Office, Town/rural setting
**Activities:** An accountant plans and administers accounting systems for an organization to provide records of assets, liabilities and financial transactions, and advises on accounting problems. There are many specializations in this field.
**Requirements** (depending on specialization)**:** Bachelor of commerce degree with specialization in accounting; accounting diploma from vocational school.

PROCESSING

### Alfalfa (Dehydrated) Packing Plant Operator

**Location:** Indoor/outdoor
**Work Conditions:** Urban/town setting
**Activities:** An alfalfa packing plant operator plans, organizes, directs & controls the dehydration of alfalfa in the processing departments of a packing plant. This operator oversees the production of dehydrated alfalfa through other managers & foremen.
**Requirements:** Graduation from an university program in management and/or around 10 years of experience in previous managerial or supervisory positions.

PROCESSING

### Arborist (Tree Expert)

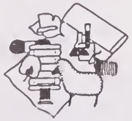
**Location:** Outdoors mainly, all seasons of year
**Work Conditions:** Urban/rural
**Activities:** The arborist prunes trees, controls pests, fertilizes trees, cables & braces limbs & transplants trees. Most arborists specialize in one area of tree care & maintenance.
**Requirements:** 11 or 12 years of general education - 1 to 2 years of on-the-job training or - one year's experience in arboriculture or a related field, & completion of a course in tree maintenance & protection - completion of licensing requirements, where applicable.

PROCESSING

### Auctioneer

**Location:** Outdoor/indoor
**Work Conditions:** Rural setting (mainly)
**Activities:** An auctioneer sells property or merchandise at an auction. The auctioneer will appraise the value of these objects beforehand. The auctioneer will then describe the object to the audience and ask for bids. The sale closes to the highest bidder.
**Requirements:** Licence from a technological school or community college.

# PROCESSING



PROCESSING

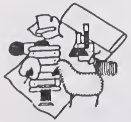
## Canning and Freezing Plant Manager

**Location:** Indoors mainly
**Work Conditions:** Urban/town setting
**Activities:** A canning and freezing plant manager plans, organizes, directs and controls the processing departments involved in canning & freezing vegetables and fruit. The plant employs both skilled and professional personnel, and the manager oversees activities through other managers and foremen.
**Requirements:** Graduation from an university program in management and/or around 10 years of experience in previous managerial or supervisory positions.

PROCESSING

## Dairy Product Manufacturer

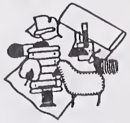
**Location:** Indoors mainly
**Work Conditions:** Urban setting
**Activities:** The dairy product manufacturer plans, organizes, directs, and controls the dairy product processing system in order to convert milk into dairy products for marketing.
**Requirements:** Graduation from a related university program; preferably a post-graduate degree & about 10 years of previous managerial and supervisory experience.



PROCESSING

## Commercial Grain Farmer

**Location:** Outdoors mainly
**Work Conditions:** Rural setting; farm
**Activities:** The commercial grain farmer cultivates & seeds land to produce grain which is then used for human consumption or animal feeds. The produce mainly grown is wheat, barley, oats and canola.
**Requirements:** 10 to 12 years of general education plus, 2 years or more in an agricultural program in a community college or university; or 2 to 6 years of on-the-job training, or practical experience gained through farm upbringing.



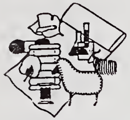
PROCESSING

## Engineer

**Location:** Indoors mainly
**Work Conditions:** Urban/rural; office
**Activities:** An engineer plans, designs & develops equipment, machines, products, systems & processes, using scientific & engineering principles. Most engineers specialize in particular aspects of the field.
**Requirements:** Bachelor's degree in engineering.

# PROCESSING

PROCESSING



## Feed/Flour Miller

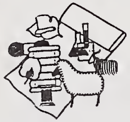
**Location:** Indoor
**Work Conditions:** Rural/urban setting
**Activities:** A feed & flour miller operates grinding and mixing machines & other equipment to process & bag custom lots of animal & poultry feed, flour or meal according to specifications.
**Requirements:** 9 or 10 years of general education; up to 3 years of combined experience & on-the-job training.

PROCESSING

## Feedlot Operator

**Location:** Indoor/outdoor
**Work Conditions:** Rural/urban
**Activities:** A feedlot operator raises calves from the time they are weaned until they have grown to a weight of 500 to 1000 pounds. These calves are then sold to the packing plants for slaughter.
**Requirements:** 12 to 13 years of general education; a 2 year diploma program in a college, offering courses in agricultural production & management - 2 to 4 years of related experience at the foreman or assistant manager level.

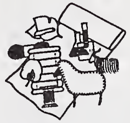
PROCESSING



## Feed Laboratory Technician

**Location:** Indoor
**Work Conditions:** Rural/urban setting; lab work.
**Activities:** A feed laboratory technician tends to the machines that clean, grind & sift small quantities of grain to prepare samples of flour for lab testing. The lab technician records data & weight for laboratory information.
**Requirements:** Secondary school education & graduation from a community college program of about 2 years in physical sciences & up to 2 years of experience on-the-job. or 4 years of on-the-job training supplemented by self-study in physical sciences.

PROCESSING



## Grain Elevator Manager

**Location:** Indoor/outdoor
**Work Conditions:** Town setting; rural area
**Activities:** Determines grade and quality of the grain. A grain elevator manager uses conveyor systems to transfer grain from stockpiles to processing or shipping points and to move grain between departments by loading and unloading railway cars. Also, maintains records for the farm and grain company.
**Requirements:** Minimum of 12 years of general education - once hired on with a company there may be extensive company courses to take for on-the-job training. Usually 1 to 2 years vocational training.

# PROCESSING

PROCESSING

## Greenhouse Operator

**Location:** Indoor/outdoor
**Work Conditions:** Rural/urban setting; greenhouse
**Activities:** A greenhouse operator plants, cultivates and harvests trees, shrubs, ornamentals, flowering plants, and vegetables in a nursery or associated greenhouse. Also, skilled in running a business to satisfy consumer needs.
**Requirements:** 12 to 13 years of general education or 2 year program in a college offering courses in agricultural production and management - 2 to 4 years of related experience at the foreman or assistant manager level.

PROCESSING

## Home Economist

**Location:** Indoor
**Work Conditions:** Urban/town setting
**Activities:** A home economist develops, interprets and applies principles of home economics through research, analysis, and consumer education in family health, nutrition and welfare; improves home-use products, and promotes sales. Specializations are attainable in this career field.
**Requirements:** Bachelor's degree in home economics or science.

PROCESSING

## Hatchery Operator

**Location:** Indoor
**Work Conditions:** Urban/town setting; hatchery
**Activities:** A hatchery operator manages poultry hatching. The operator arranges for a supply of hatching eggs, schedules hatching dates, plans advertising & sales programs, purchases supplies, provides advice to customers & confers with the personnel manager on requirements for staff. Duties will vary with the size of the establishment.
**Requirements:** 12 to 13 years of general education; a 2 year diploma program in a college, offering courses in agricultural production & management - two to 4 years of related experience at the foreman or assistant manager level.

PROCESSING

## Jockey

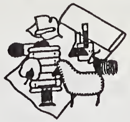
**Location:** Outdoors mainly
**Work Conditions:** Rural/town setting; racetrack and stables.
**Activities:** A jockey rides horses in competitive horse-races. In addition a jockey must ride the morning workout to determine how to ride that particular horse, receive riding instructions from the horse's trainer before the race, and discuss the horse's performance with its trainer after the race.
**Requirements:** - 9 to 10 years of general education - on-the-job training or apprenticeship for 2 years or more depending on the person's ability - licensing with a provincial body controlling the sport.

# PROCESSING

PROCESSING

## Horticulturist

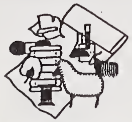
**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural; mainly lab work
**Activities:** A horticulturist conducts experiments, studies, and observes the characteristics of fruits and flowers in order to develop and improve plant varieties, production methods & breeding techniques; determine the effects of environmental conditions on plant growth, and improve the quality and yield of the harvest. Duties may also include supervision of landscape operations & providing technical advice pertaining to vegetable growth. Specializations in this career field are also attainable.
**Requirements:** Bachelor's degree in science.



PROCESSING

## Market Gardener

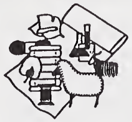
**Location:** Outdoor mainly
**Work Conditions:** Rural setting; farm
**Activities:** A market gardener grows vegetables & fruits on a field scale & then sells the produce through market outlets such as Farmer's Market, gate sales "pick your own" & wholesale. Various vegetables are grown & the gardener must have knowledge of the treatment for each type.
**Requirements:**
- 8 to 10 years of general education
- 6 months to 1 year of on-the-job training.



PROCESSING

## Livestock Buyer (Slaughter House)

**Location:** Outdoor/indoor
**Work Conditions:** Rural/urban; slaughter house
**Activities:** A livestock buyer buys livestock & then segregates, feeds & cares for the livestock in preparation for the slaughter house or meat-packing plant. The livestock is marked, weighed & verified beforehand.
**Requirements:**
- 6 to 8 years of general education
- one week to three months of on-the-job training.



PROCESSING

## Meat Packing Plant Butcher

**Location:** Indoors mainly
**Work Conditions:** Urban/town; meat packing plant
**Activities:** The butcher slaughters animals in small meat packing establishments, using tools, such as saws, cleavers & knives. The butcher may also prepare the meats for smoking or making sausages & other meat products.
**Requirements:**
- 10 to 12 years of general education
- a 2 to 3 year apprenticeship or similar form of on-the-job training
- take a diploma program at a technological school.

# PROCESSING

PROCESSING

## Meat Packing Plant Packager

**Location:** Indoors mainly
**Work Conditions:** Urban/town; meat packing plant
**Activities:** The meat packing plant packager prepares the ready-cut meat into packages ready for marketing at a retail grocery store.
**Requirements:**
- Up to 8 years of general education
- one to 6 months of on-the-job training.

PROCESSING

## Milk Processing Plant Operator

**Location:** Indoor mainly
**Work Conditions:** Urban/town setting
**Activities:** The milk processing plant operator plans, organizes, directs & controls the processing of raw milk and cream to make pasteurized milk & cream, butter, cheese, ice cream, frozen novelties & other dairy products. Through other foremen & supervisors, this operator directs the milk processing systems.
**Requirements:** Graduation from an university program in management and/or up to ten years of experience in previous managerial or supervisory positions.

PROCESSING

## Mechanic

**Location:** Indoor/outdoor
**Work Conditions:** Rural/town setting; garage
**Activities:** A mechanic repairs & overhauls, on farms or in repair shops, farm machinery, such as combines, tractors, movers, or other equipment. The mechanic may also assemble new machinery & equipment.
**Requirements:** Trade certificate from a technological school on apprenticeship program or community college specializing in an agricultural mechanic program.

PROCESSING

## Sales Representative

**Location:** Indoor/outdoor
**Work Conditions:** Urban/town setting
**Activities:** A sales representative is concerned with selling commodities on a wholesale basis in an allotted geographical area to wholesale, retail, industrial or professional establishments.
**Requirements:** Minimum of 12 years of general education; some product & plant experience followed by extensive on-the-job training for a period of from 6 months to 2 years.

# PROCESSING

PROCESSING

## Seed Cleaning Technician

**Location:** Indoors mainly
**Work Conditions:** Urban/town setting
**Activities:** A seed cleaning technician tends to machines that remove foreign matter, separate and dry grain before the milling process. This technician may be designated according to particular machine or type of grain to be cleaned.
**Requirements:** 8 to 10 years of general education; up to 1 year combined experience in related jobs and on-the-job training.

PROCESSING

## Sheep Shearer

**Location:** Indoor/outdoor
**Work Conditions:** Rural/urban
**Activities:** A sheep shearer shears the wool from sheep. The shearer places the animal on a shearing platform, then shears the wool close to the skin to remove fleece in one piece using hand-operated or power-driven clippers. Then the shearer spreads the fleece on the floor with hide side up and rolls it into a compact bundle and ties with twine.
**Requirements:**
- 6 to 8 years of general education.
- 1 year or more of on-the-job training.
- Completion of a college course.

PROCESSING

## Seed Packing Plant Operator

**Location:** Indoors mainly
**Work Conditions:** Urban/town setting
**Activities:** The seed packing plant operator plans, organizes, directs & controls the packing of seeds in a seed packing plant. Through other foremen & supervisors, this operator directs the seed packing processing systems.
**Requirements:** Graduation from an university program in management and/or around 10 years of experience in previous managerial or supervisory positions.

PROCESSING

## Silage Bag Producer

**Location:** Indoors mainly
**Work Conditions:** Urban/Town setting
**Activities:** The silage bag producer produces and markets a type of plastic bag for storing silage. The bag producer also chooses advertising, sells to farmers, distributors and dealers, and supervises staff through other supervisors.
**Requirements:** On-the-job training; for manager position - some managerial courses at a community college or other post-secondary institutes.

# PROCESSING

PROCESSING

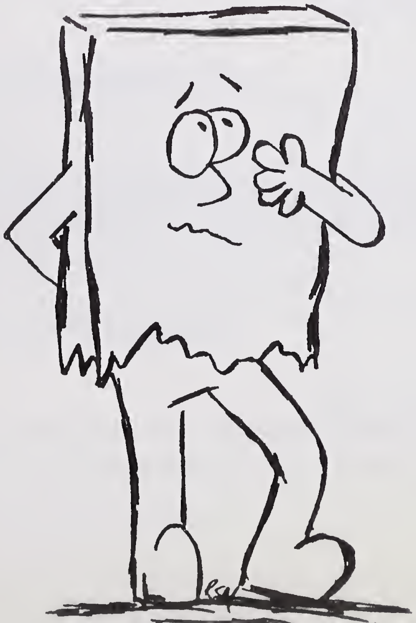
## Trucker/Transporter

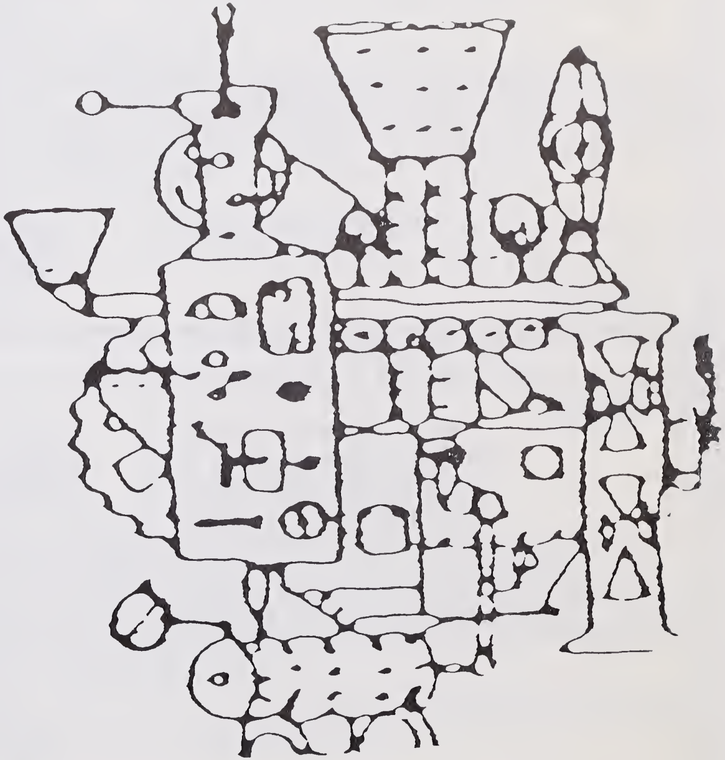
**Location:** Indoor/outdoor

**Work Conditions:** Urban/rural; mainly truck transport

**Activities:** Generally, a trucker/transporter operates gasoline or diesel-powered tractor-trailer combinations to transport produce.

**Requirements:**
- 7 to 11 years of general education
- 1 to 6 months of on-the-job training
- one year of previous driving experience and a good driving record.
- completion of test and examination requirements.





# MARKETING

MARKETING

## Farm Reporter (Media)

**Location:** Indoor/outdoor
**Work Conditions:** Rural/urban
**Activities:** A farm reporter collects & analyzes facts about news-worthy farm related events by interview, investigation, or observation & then writes newspaper stories conforming to defined editorial techniques & format.
**Requirements:** A 2 to 4 year university program in arts, journalism, literature or languages.

MARKETING

## Advertising Sales Agent

**Location:** Indoor/outdoor
**Work Conditions:** Urban/town setting
**Activities:** An advertising agent sells classified & display advertising space for publications. This salesman may originate and develop special advertising campaigns & may be designated according to the type of advertising sold (ie. display advertising).
**Requirements:** - A minimum of 12 years of general education.
- on-the-job training for a period of at least 1 year.
- several years experience in a related field.

MARKETING

## Journalist

**Location:** Indoor/outdoor
**Work Conditions:** Rural/urban
**Activities:** A journalist writes feature columns, appearing periodically in a newspaper or magazine, based on personal observations & knowledge of subject matter. The journalist may be designated according to the type of column. (i.e. society columnist).
**Requirements:** A 2 to 4 year university/college program in arts, journalism, literature or languages.

MARKETING

## Farmers' Market Manager

**Location:** Indoor/outdoor
**Work Conditions:** Rural/town setting
**Activities:** A farmer's market manager plans, organizes, directs and controls the farmer's market business.
**Requirements:** Graduation from a university program, and/or 10 years experience in previous managerial or supervisory positions.

# MARKETING

MARKETING

## Auctioneer

**Location:** Outdoor/indoor
**Work Conditions:** Rural setting (mainly)
**Activities:** An auctioneer sells property or merchandise at an auction. The auctioneer will appraise the value of these objects before hand. The auctioneer will then describe the object to the audience and ask for bids. The sale closes to the highest bidder.
**Requirements:** Licence from a technological school or community college.

MARKETING

## Instructor/Teacher

**Location:** Indoors
**Work Conditions:** Urban/rural; school
**Activities:** The instructor/teacher teaches vocational and academic subjects in community colleges, universities, private/public schools or other institutes. Typical duties include research, instruction, examination & assistance.
**Requirements:**
- 4 years of university study in a specialized area leading to a bachelor's degree.
- At higher post-secondary schools a Masters or Ph.d. is required.
- In Alberta, licensing is compulsory.

MARKETING

## Retail Store Owner/Manager

**Location:** Indoors
**Work Conditions:** Rural/urban
**Activities:** A retail store owner plans, organizes, directs, & controls the operations of a retail-trade establishment concerned with buying goods & reselling them to the public. The supervision & coordination of sales personnel is involved.
**Requirements:**
- May require a licence to sell.
- usually selected from employees who have demonstrated leadership qualities & initiative in lower level jobs.
- managerial courses can be taken at community colleges.

MARKETING

## Sales Representative

**Location:** Indoor/outdoor
**Work Conditions:** Urban/town setting
**Activities:** A sales representative is concerned with selling commodities on a wholesale basis in an allotted geographical area to wholesale, retail, industrial or professional establishments.
**Requirements:**
- Minimum of 12 years of general education.
- some product & plant experience followed by extensive on-the-job training for a period of from 6 months to 2 years.

# MARKETING

MARKETING

### Wholesale Manager

**Location:** Indoor
**Work Conditions:** Urban setting
**Activities:** A wholesale manager plans, organizes, directs & controls the operations of a wholesale establishment (or department) engaged in buying & warehousing merchandise & later selling it to retailers. The supervision of personnel is involved.
**Requirements:**
- Requires a licence to sell.
- promotions from lower level jobs.
- managerial courses in a community college or university degree in commerce.

MARKETING

### Greenhouse Operator

**Location:** Indoor/outdoor
**Work Conditions:** Rural/urban setting; greenhouse
**Activities:** A greenhouse operator plants, cultivates and harvests trees, shrubs, ornamentals, flowering plants, and vegetables in a nursery or associated greenhouse. Directly markets product to consumers.
**Requirements:**
- 12 to 13 years of general education or a 2 year program in a college offering courses in agricultural production and management
- 2 to 4 years of related experience at the foreman or assistant manager level.

# INSPECTION AND REGULATION

INSPECTION &
REGULATION

### Administrator, Marketing Board

**Location:** Indoor
**Work Conditions:** Urban; office
**Activities:** An administrator plans, organizes, directs & controls, through fellow administrators & supervisors, the activities & regulations of the marketing board. The marketing board controls the sale of produce for each production line e.g. poultry, grain, meat.
**Requirements:**
- Graduation from a university program, preferably with a post-graduate degree.
- certification with provincial legislation is necessary.
- 10 years experience in managerial or supervisory positions.

INSPECTION &
REGULATION

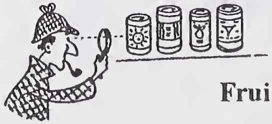
### Dairy Inspector

**Location:** Indoor/outdoor
**Work Conditions:** Rural/town setting
**Activities:** A dairy inspector ensures that dairy products conform with government standards and health regulations & are suitable for marketing. This inspector may also regulate importation of dairy products.
**Requirements:** A thorough knowledge and years of practical experience in dairy production - cumulative experience & knowledge in marketing.

INSPECTION &
REGULATION

### Brand Inspector

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural
**Activities:** The brand inspector inspects the branding of animals to ensure the process being used by the producer complies with government standards. Registration requirements are regulated by the brand inspector.
**Requirements:** A thorough knowledge & years of practical experience of branding, cumulative experience & knowledge in marketing.



INSPECTION &
REGULATION

### Fruit And Vegetable Inspector

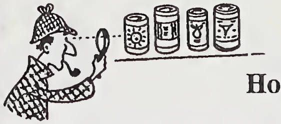
**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural
**Activities:** The fruit & vegetable inspector enforces laws and regulations to ensure produce complies with government standards and health regulations. Grading, registration requirements, labelling, guaranteeing, importing and exporting products are regulated by this inspector.
**Requirements:** A thorough knowledge & years of practical experience in fruit & vegetable production - cumulative experience & knowledge in marketing.

# INSPECTION AND REGULATION

INSPECTION &
REGULATION

## Grain Inspector

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural
**Activities:** The grain inspector ensures that field crop produce conforms to government standards & health regulations. Grading seeds, hay, inspecting cargo, written reports of disease conditions & registration requirements are taken care of by the grain inspector. The Canadian Seed Grower's Association is the regulatory agency in Canada.
**Requirements:** A thorough knowledge & years of practical experience in grain production - cumulative experience & knowledge in marketing.



INSPECTION &
REGULATION

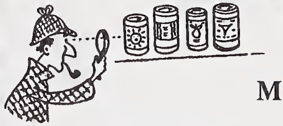
## Honey Grader /Inspector

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural
**Activities:** The honey grader ensures that honey products meet with government standards & health regulations. Diseases, fertilizers, pesticides, registration requirements, grading, packing & loading are regulated by this inspector.
**Requirements:** Thorough knowledge & practical experience in honey production - cumulative experience & knowledge in marketing.

INSPECTION &
REGULATION

## Health Inspector

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural
**Activities:** The health inspector enforces laws and regulations governing health standards & provides advice. Duties include writing reports, issuing violation notices & corrective orders.
**Requirements:** A thorough knowledge & years of practical experience in the governmental health regulations and laws, involving all types of production or service establishments - cumulative experience & knowledge in marketing.



INSPECTION &
REGULATION

## Meat Grader/Inspector

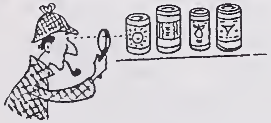
**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural
**Activities:** The meat inspector ensures that meat products meet government standards and health regulations. Diseases, ingredients added to the meats, grading, importation & exportation are regulated by this inspector.
**Requirements:** A thorough knowledge & practical experience in meat production - cumulative experience & knowledge in marketing.

# INSPECTION AND REGULATION

INSPECTION &
REGULATION

### Plant Product Inspector

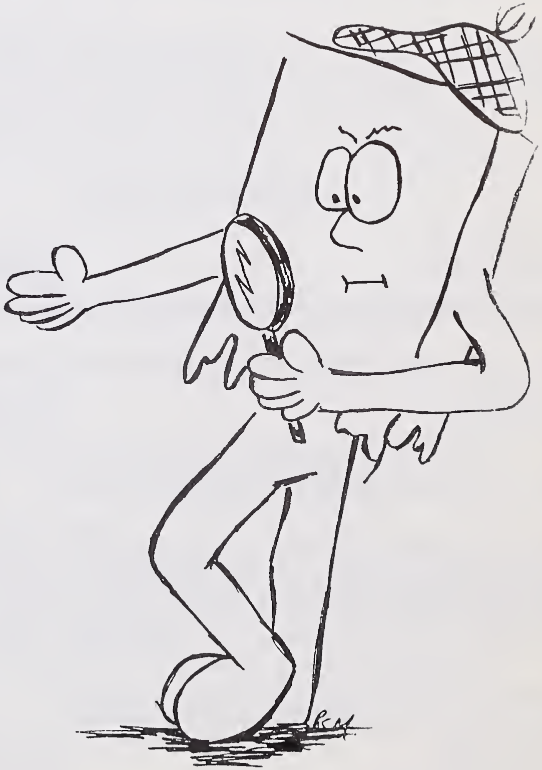
**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural
**Activities:** The plant product inspector ensures that plant products conform with government standards & health regulations.
**Requirements:** A thorough knowledge & practical experience in plant product production - cumulative experience & knowledge in marketing.



INSPECTION &
REGULATION

### Poultry Inspector

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural
**Activities:** The poultry inspector ensures that poultry & their products - eggs - conform to government standards & health regulations. This inspector examines the poultry to ensure proper grading. Inspection of egg samples to determine their conditions, interior quality, shape & weight of the shell.
**Requirements:** A thorough knowledge & practical experience in poultry production - Cumulative experience & knowledge in marketing.



# RESEARCH AND DEVELOPMENT

RESEARCH &
DEVELOPMENT

### Agricultural Administrator/ Government Department

**Location:** Indoors
**Work Conditions:** Urban setting/office
**Activities:** The agricultural administrator plans, organizes, directs and controls, through supervisors, the activities of an agriculture division, whether it be a national, provincial, territorial or local government division. They implement government agricultural policy. The administrator may also sit on personnel promotional or selection boards.
**Requirements:** Graduation from a university program preferably with a post-graduate degree or ten years experience with supplementary courses taken.

RESEARCH &
DEVELOPMENT

### Agricultural Engineer

**Location:** Mainly indoors
**Work Conditions:** Urban/town setting; office
**Activities:** The agricultural engineer studies & advises on engineering problems involving agricultural issues; designs agricultural machinery, structures and equipment and supervises their manufacture, construction and installation.
**Requirements:** Bachelor's degree or higher in agricultural engineering.

RESEARCH &
DEVELOPMENT

### Agricultural Economist

**Location:** Mainly indoors; requires rural field trips also.
**Work Conditions:** Urban setting/office
**Activities:** Agricultural economists, deal with problems related to production, financing, pricing and marketing of farm products. They also investigate foreign & domestic commodity exchanges, agricultural transportation, tax & tariff problems in order to locate superior markets. They devise methods or policies to increase efficiency of management, income & effect favourable agricultural legislation.
**Requirements:** Bachelor's degree or higher in business or Arts (major Economics).

RESEARCH &
DEVELOPMENT

### Agronomist/Plant Scientist

**Location:** Mainly indoors; travelling involved
**Work Conditions:** Urban/town setting; mainly lab work.
**Activities:** An agronomist conducts experiments with vegetable & field crops, soils, growing & breeding methods, to ensure a higher yield, improved quality & increased production. The agronomist also writes educational bulletins & information to the growers of these products.
**Requirements:** Bachelor's degree or higher in agricultural science.

# RESEARCH AND DEVELOPMENT

RESEARCH &
DEVELOPMENT

## Anatomist

Location: Indoors
Work Conditions: Urban setting; laboratory/office
Activities: An anatomist studies the structure of animals & humans to increase scientific knowledge & devise practical applications in such related areas as biology and medicine. They prepare & supervise the writing of scientific reports based on observations & experiments. They also may supervise & coordinate the work of technologists & technicians.
**Requirements:** Bachelor's degree or higher in zoology.

RESEARCH &
DEVELOPMENT

## Animal Scientist

**Location:** Indoor/outdoor
**Work Conditions:** Mainly laboratory work; urban/town setting
**Activities:** The animal scientist conducts research in animal genetics, advanced animal husbandry methods, selection, breeding, feeding, management and marketing of dairy, beef & dual purpose cattle, horses, poultry, sheep, hogs & goats. One can specialize in a specific type of animal or a particular aspect of animal science.
**Requirements:** Bachelor's degree or higher in science.

RESEARCH &
DEVELOPMENT

## Animal Health Technologist
## Veterinary Attendant

**Location:** Indoor/outdoor
**Work Conditions:** Animal hospital, clinic, feedlots, animal shelters, urban or rural setting
**Activities:** Animal health technologists assist in caring for animals under treatment for disease or injury. Duties include sterilizing surgical equipment, preparing surgical supplies, assisting during surgery, giving medications to the animal, and performing laboratory tests.
**Requirements:** - 8 to 12 years of general education.
- a technological post-secondary school diploma (1 to 2 years).

RESEARCH &
DEVELOPMENT

## Architect/Draftsperson
## (Building)

**Location:** Indoor/outdoor
**Work Conditions:** Urban/Town setting, office
**Activities:** An architect's duties are to design buildings, develop plans, specifications and detailed drawings, arrange contracts and exercise general supervision over construction.
**Requirements:** Bachelor's degree in architecture.

# RESEARCH AND DEVELOPMENT

RESEARCH &
DEVELOPMENT

### Architect/Draftsperson (Landscape)

**Location:** Outdoor/indoor
**Work Conditions:** Urban or rural setting; office
**Activities:** A landscape architect plans & designs lay-outs for optimum usage of land areas. (For example, parks, airports, industrial, commercial & residential subdivisions.) The landscape architect will confer with clients, economists, engineers & other architects on the overall proposal. Supervision of the construction work is also a large part of this area of work.
**Requirements:** Bachelor's degree in landscape architecture.

RESEARCH &
DEVELOPMENT

### Botanist

**Location:** Indoor/outdoor.
**Work Conditions:** Urban/rural, mainly laboratory work
**Activities:** A botanist conducts research into physiology, heredity, environment, distribution, structure & economic value of plants for application in agriculture, forestry, horticulture & medicine. Botanists also experiment and prepare reports & studies for other agricultural & biological scientists . They may also supervise & coordinate the work of technologists & technicians.
**Requirements:** Bachelor's degree or higher in science.

RESEARCH &
DEVELOPMENT

### Biologist

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural; mainly laboratory work
**Activities:** The biologist conducts basic and applied research on living organisms, vital processes and their relationship to one another and their environment. Specializations are very common in this general occupation.
**Requirements:** Bachelor's degree or higher in science.

RESEARCH &
DEVELOPMENT

### Chemist (Agricultural)

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural; mainly laboratory work.
**Activities:** The agricultural chemist develops new and better uses for agricultural products & investigates the processing & storing of these commodities. Duties include experimentation, preparing reports & supervising technologists & technicians.
**Requirements:** Bachelor's degree or higher in agricultural science or chemistry.

# RESEARCH AND DEVELOPMENT

RESEARCH &
DEVELOPMENT

### Climatologist

Location: Indoor/outdoor
**Work Conditions:** Urban/town setting; mainly laboratory work.
**Activities:** A climatologist focuses on meteorological activity and historical weather records. They use this data to analyze and forecast long-terms weather patterns and movements. Duties may also include research into recording and forecasting methods and equipment.
**Requirements:** Bachelor's degree in science. Requires 4 to 10 years of post-secondary study depending on job status.

RESEARCH &
DEVELOPMENT

### District Agriculturist

**Location:** Indoor/outdoor
**Work Conditions:** Office; involves field trips to district areas farms.
**Activities:** The district agriculturist advises on the operation & economics of farms, & helps to implement improvements to the farm systems of a specific district. The D.A. may also conduct research into the growth, genetics & viability of plants & animals, or the nature & composition of soils.
**Requirements:** Bachelor's degree in agriculture.

RESEARCH &
DEVELOPMENT

### Consultant (Agricultural)

**Location:** Indoors
**Work Conditions:** Urban/town setting; office
**Activities:** A consultant utilizes expertise & knowledge of a specialized field of activity to evaluate & recommend improvements in the practice of that activity. Analyzing data, devising tests, preparing reports & documents & assisting in implementing the improvements are all a part of a consultant's duties . Specializations in this field are very common.
**Requirements:** Bachelor's degree or higher in agricultural science, commerce or any related speciality.

RESEARCH &
DEVELOPMENT

### Entomologist

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural; mainly laboratory work
**Activities:** The entomologist investigates the classification, life cycle & habits of insects & allied forms of life. Developing new & improved pesticides is also a part of this career field. The entomologist may also supervise & coordinate the work of technicians & technologists.
**Requirements:** Bachelor's degree or higher in science.

# RESEARCH AND DEVELOPMENT

RESEARCH &
DEVELOPMENT

## Food Scientist

**Location:** Indoor/outdoor
**Work Conditions:** Urban/town setting; lab work
**Activities:** A food scientist studies the development, processing, preservation & distribution of new or existing food products. Responsibilities may include analyzing food products, studying effects of different chemical processes on the products, developing new methods of preserving the products, supervising the work of technologists & preparing scientific papers on subjects dealing with food science.
**Requirements:** Bachelor's degree or higher in science.

RESEARCH &
DEVELOPMENT

## Home Economist

**Location:** Indoors
**Work Conditions:** Urban/Town setting
**Activities:** A home economist develops, interprets & applies principles of home economics to such issues as family health, nutrition improving home-use products, & promoting sales. Specializations are common.
**Requirements:** Bachelor's degree in home economics or science.

RESEARCH &
DEVELOPMENT

## Geneticist

**Location:** Indoor mainly
**Work Conditions:** Urban/town setting; Mainly lab work
**Activities:** A geneticist studies the inheritance of traits among organisms related by descent, and the biochemical & physiological means by which these are established & controlled. Supervision & the coordination of the work of technologists & technicians may also be part of a geneticist's responsibility. Specializations are common.
**Requirements:** Bachelor's degree or higher in science.

RESEARCH &
DEVELOPMENT

## Horticulturist

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural mainly lab work
**Activities:** A horticulturist conducts experiments, studies, & observes the characteristics of fruits & flowers to develop and improve plant varieties, production methods & breeding techniques, to determine the effects of environmental conditions on plant growth, and to improve the quality & yield of the harvest. Duties may also include supervising landscape operations & providing technical advice on plant growth. Specializations in this career field are also attainable.
**Requirements:** Bachelor's degree in science.

# RESEARCH AND DEVELOPMENT

RESEARCH &
DEVELOPMENT

## Information Officer

**Location:** Indoors
**Work Conditions:** Urban/rural; office
**Activities:** An information officer receives clients, customers & others in offices and establishments, provides information and answers inquiries by telephone or in person.
**Requirements:** Graduation from secondary school and courses taken at a technological school.

RESEARCH &
DEVELOPMENT

## Surveyor

**Location:** Outdoors mainly
**Work Conditions:** Urban/rural setting
**Activities:** A surveyor identifies exact location & measurement of points, elevations, lines, areas & contours of earth's surface for construction, mapmaking, land valuation, etc. Specializations in this career field are attainable.
**Requirements:** Bachelor's degree in civil engineering with surveying option or surveying technology or apprenticeship of at least 4 years.

RESEARCH &
DEVELOPMENT

## Regional Specialist

**Location:** Indoors
**Work Conditions:** Urban/rural; office
**Activities:** A regional specialist plans, organizes, directs & controls the activities of a national provincial, territorial or local government in a particular branch service or department unit.
**Requirements:** Graduate degree in agricultural science.

RESEARCH &
DEVELOPMENT

## Statistician

**Location:** Indoor/outdoor
**Work Conditions:** Mainly rural setting; some office work and laboratory work.
**Activities:** A statistician specializing in biological & agricultural science will plan & conduct surveys & experiments to obtain statistics for basic scientific research related to life processes of plants & animals.
**Requirements:** Bachelor's degree in science with a major in pure or applied mathematics & additional courses in agriculture & biology.

# RESEARCH AND DEVELOPMENT

RESEARCH &
DEVELOPMENT

### Rural Sociologist

**Location:** Indoors
**Work Conditions:** Rural setting; involves field trips
**Activities:** A rural sociologist studies the development structure, social patterns & inter-relationships of human society in the rural areas. Some of these inter-relationships may include family, education, poverty, crime, politics, etc. Organizing & presenting the data for suitable application is also a part of this career field. One may also teach rural sociology at a post-secondary level.
**Requirements:** Bachelor's degree or higher in sociology.

RESEARCH &
DEVELOPMENT

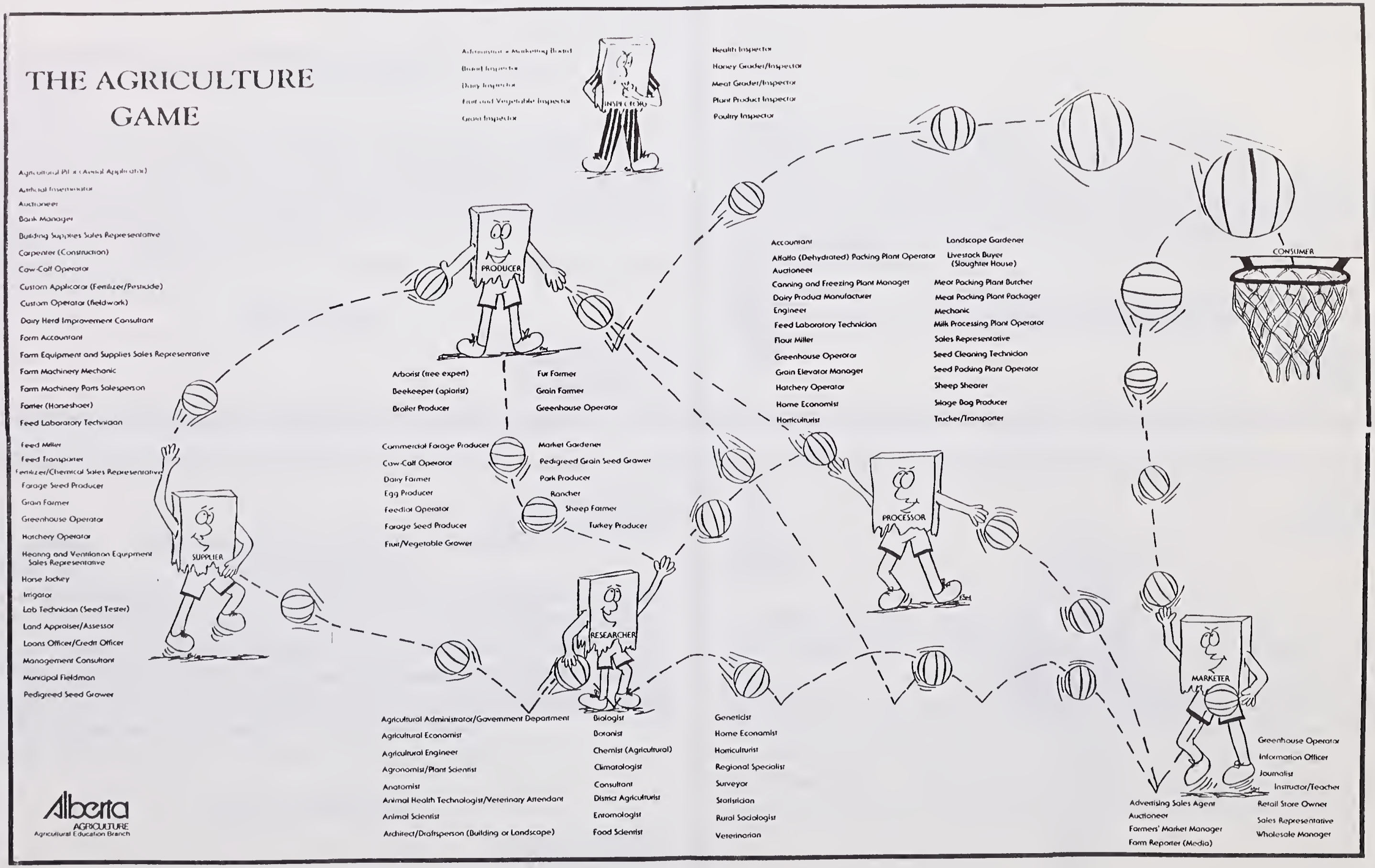
### Veterinarian

**Location:** Indoor/outdoor
**Work Conditions:** Rural/urban setting
**Activities:** A veterinarian diagnoses, prevents, & treats the disorders of animals. Specific activities include: physical examination, lab test, X-ray examination, surgery, administering drugs, inoculations, autopsies & advice to clients. A veterinarian may operate a clinic and may supervise other technologists.
**Requirements:** 4 to 6 years university program in veterinary medicine leading to the degree of Doctor of Veterinary Medicine.

RESEARCH &
DEVELOPMENT

### Remote Sensing Technician

**Location:** Indoor/outdoor
**Work Conditions:** Urban/rural office. Involves field trips.
**Activities:** Operates airborne remote sensing equipment to acquire survey data for various applications such as, agriculture and forestry land use, heat loss assessments and industrial support services.
**Requirements:** 2 to 4 years vocational preparation.



# THE AGRICULTURE GAME

Agricultural Pilot (Aerial Application)
Artificial Inseminator
Auctioneer
Bank Manager
Building Supplies Sales Representative
Carpenter (Construction)
Cow-Calf Operator
Custom Applicator (Fertilizer/Pesticide)
Custom Operator (fieldwork)
Dairy Herd Improvement Consultant
Farm Accountant
Farm Equipment and Supplies Sales Representative
Farm Machinery Mechanic
Farm Machinery Parts Salesperson
Farrier (Horseshoer)
Feed Laboratory Technician
Feed Miller
Feed Transporter
Fertilizer/Chemical Sales Representative
Forage Seed Producer
Grain Farmer
Greenhouse Operator
Hatchery Operator
Heating and Ventilation Equipment Sales Representative
Horse Jockey
Irrigator
Lab Technician (Seed Tester)
Land Appraiser/Assessor
Loans Officer/Credit Officer
Management Consultant
Municipal Fieldman
Pedigreed Seed Grower

Administrator - Marketing Board
Brand Inspector
Dairy Inspector
Fruit and Vegetable Inspector
Grain Inspector

Health Inspector
Honey Grader/Inspector
Meat Grader/Inspector
Plant Product Inspector
Poultry Inspector

Arborist (tree expert)
Beekeeper (apiarist)
Broiler Producer

Fur Farmer
Grain Farmer
Greenhouse Operator

Commercial Forage Producer
Cow-Calf Operator
Dairy Farmer
Egg Producer
Feedlot Operator
Forage Seed Producer
Fruit/Vegetable Grower

Market Gardener
Pedigreed Grain Seed Grower
Pork Producer
Rancher
Sheep Farmer
Turkey Producer

Accountant
Alfalfa (Dehydrated) Packing Plant Operator
Auctioneer
Canning and Freezing Plant Manager
Dairy Product Manufacturer
Engineer
Feed Laboratory Technician
Flour Miller
Greenhouse Operator
Grain Elevator Manager
Hatchery Operator
Home Economist
Horticulturist

Landscape Gardener
Livestock Buyer (Slaughter House)
Meat Packing Plant Butcher
Meat Packing Plant Packager
Mechanic
Milk Processing Plant Operator
Sales Representative
Seed Cleaning Technician
Seed Packing Plant Operator
Sheep Shearer
Silage Bag Producer
Trucker/Transporter

Agricultural Administrator/Government Department
Agricultural Economist
Agricultural Engineer
Agronomist/Plant Scientist
Anatomist
Animal Health Technologist/Veterinary Attendant
Animal Scientist
Architect/Draftsperson (Building or Landscape)

Biologist
Botanist
Chemist (Agricultural)
Climatologist
Consultant
District Agriculturist
Entomologist
Food Scientist

Geneticist
Home Economist
Horticulturist
Regional Specialist
Surveyor
Statistician
Rural Sociologist
Veterinarian

Advertising Sales Agent
Auctioneer
Farmers' Market Manager
Farm Reporter (Media)

Greenhouse Operator
Information Officer
Journalist
Instructor/Teacher
Retail Store Owner
Sales Representative
Wholesale Manager

Alberta
AGRICULTURE
Agricultural Education Branch

**Full color poster available through Ag in the Classroom.**

# Cattle Industry/Beef Production

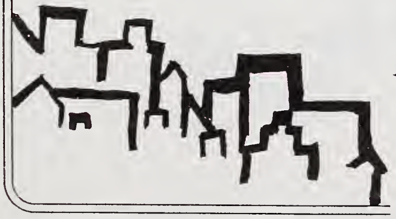
# Beekeeper/Honey Production

# Greenhouse Operation

# Activity 2

## "CAN I TRY THIS ONE ONE FOR SIZE?"

| | |
|---|---|
| **OBJECTIVE:** | Students will identify specific positions in the production, processing and distribution system that can help to solve a production problem. |
| **CURRICULUM FIT:** | Career and Life Management 20<br>Theme D - Careers and the World of Work |
| **LESSON CONCEPTS:** | Personal Career Plan, identifying Alternatives |
| **AGRICULTURE CONCEPTS:** | Economic Importance<br>Production, Processing and Distribution Systems<br>Diversity |
| **COGNITIVE LEVEL:** | Comprehension, Application |
| **MATERIALS REQUIRED:** | problem package (included) |
| **TIME REQUIRED:** | One 50 minute class. |

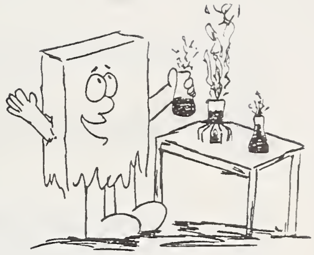


# BACKGROUND - For the Teacher

Students cannot select careers effectively by judging on the basis of a position title or description: knowing what people do in a job and how they are affected by changes in the industry are also important. These are the subjects of Activity Two.

This lesson is designed to build on the information gathered in Activity One. There students saw how many different people are involved in a particular kind of food production. Here they will see how those people work together to solve problems that arise in producing, processing or marketing those agricultural products.

In developing solutions to the problems they confront, students will experience how career people interact at work. By role playing to the class and watching other groups' dramatizations, they will see more clearly how these interactions produce and control solutions.



## PROCEDURE

### Part 1

Preparation

1. Make a photocopy of the problem cards that match agricultural production systems selected in Activity 1.
2. Separate the individual problems so that members of the group can choose one.

### Part 2

Introduction

3. Explain to students that they are to see how the system that they just studied works to solve problems.

### Part 3

The Activity

4. Students choose a card from the problem section of their producer package. The card will identify one of the careers as the problem finder.
5. The student looking after that career set reads the problem to the group. After reading the card, the group decides which member to approach for the solution.
6. Members continue identifying people who can contribute to a solution until they have a workable answer.

### Part 4

Conclusion

7. Have each group role play the problem - solution sequence for the class.

## DISCUSSION QUESTIONS

1. How do real people signal others in the system about problems they discover?

2. As a consumer, who would you contact about problems with a food product?

## RELATED ACTIVITIES

1. Scan a newspaper business section for a week and clip articles on innovation and careers related to agriculture.

2. This book includes fifteen study prints of people working in varied parts of agriculture. Have groups of students analyze the pictures to determine the lifestyle of the people shown.

# TEACHER REFERENCE SHEET 2.1

Students in the fur farming group draw the following card.

Furriers inform their wholesalers that they are reducing their operations by 25% because of harassment from animal rights activities. They expect another 25% reduction next year.

**WHAT CAN BE DONE?**

Jan has looked at marketing careers, so she reads the problem to the group. She then leads the discussion of how the industry can respond.

Each student is asked what people in his or her part of the process can contribute to a solution. The group looks at such questions as:

- Do hide buyers, tanners, tailors and other processors have a role to play in a solution?
- Are fur farmers causing harm to the animals they keep?
- Is research needed on techniques or facilities?
- Is there information that needs to be published? How should this be done?

After twenty minutes of discussion, the group uses five minutes to organize its information into a five minute presentation to the class.

# PROBLEM SHEET 2.1

## Cow-Calf Operation

### SUPPLIER -- IDENTIFIED PROBLEM

The veterinarian in a middle-sized, central Alberta town finds that she cannot meet the demand for farm visits in the surrounding community. Her customers don't feel they can afford the costs or time to bring all their animals to her office.

### PRODUCER -- IDENTIFIED PROBLEM

A Northern Alberta cow-calf operator finds that his calves and cows are constantly being bitten by blackflies. The cows rarely stay still enough to graze long; the calves are not gaining enough weight for him to make money.

### PROCESSOR -- IDENTIFIED PROBLEM

A major feedlot owner complains that calves bought from one particular set of customers are not thriving, and that many arrive with "shipping fever".

### MARKETER -- IDENTIFIED PROBLEM

Retail sales of beef are found to be down 20% from previous years. Price reductions are not increasing sales enough to be worthwhile.

### REGULATOR -- IDENTIFIED PROBLEM

A routine inspection of beef at a slaughter house reveals traces of antibiotics in the meat from 25 of the carcasses.

# PROBLEM SHEET 2.2

## Feedlot Operation

### SUPPLIER -- IDENTIFIED PROBLEM

A farm equipment dealer has been receiving an unusually high number of complaints about breakdowns in an automatic feeder system that he carries.

### PRODUCER -- IDENTIFIED PROBLEM

A feedlot company finds that they cannot budget effectively because the amount and price of their feed is so variable.

### PROCESSOR -- IDENTIFIED PROBLEM

A major beef processor finds that the time meat must hang before it can be cut up limits the amount her company can handle in a year. By increasing the number of animals processed they can increase their net income.

### MARKETER -- IDENTIFIED PROBLEM

Retail butchers and meat markets would like a way to lengthen the time beef can be displayed and sold as fresh.

### REGULATOR -- IDENTIFIED PROBLEM

Health inspectors in a town downstream of a 5000 animal feedlot find a sudden increase in organic debris and fecal coliform bacteria in their water supply. It appears to begin with runoff from the feedlot corrals.

# PROBLEM SHEET 2.3

## Sheep Production

### SUPPLIER -- IDENTIFIED PROBLEM

As a bank manager you are asked by a local sheep producer for a loan to cover: **i)** operator costs until the next lambs can be sold, and **ii)** the costs of expanding the operation to twice its size.

### PRODUCER -- IDENTIFIED PROBLEM

A lamb producer suddenly finds that hoof-rot has developed in his herd.

### PROCESSOR -- IDENTIFIED PROBLEM

The meat from many of the lambs bought from one producer is bruised and unsaleable.

### MARKETER -- IDENTIFIED PROBLEM

The Alberta lamb producers ask an advertising agency to develop a campaign that will increase sales in Alberta by 15 percent.

### REGULATOR -- IDENTIFIED PROBLEM

As an inspector for the Alberta SPCA you receive a complaint that a sheep producer is allowing his sheep to starve.

# PROBLEM SHEET 2.4

## Dairy Production

**SUPPLIER -- IDENTIFIED PROBLEM**

You are a plastics manufacturer and a dairy farmer asks you to develop a liner that will stop air from leaking into silos. This air leakage is allowing mold to develop in the silage.

**PRODUCER -- IDENTIFIED PROBLEM**

A dairy farmer would like to increase the average daily milk production of his cows.

**PROCESSOR -- IDENTIFIED PROBLEM**

Marketing studies indicate that people want to buy more skim and low-fat dairy products and fewer regular ones. Milk processors must pay a bonus for butterfat content in milk.

**MARKETER -- IDENTIFIED PROBLEM**

Lead an all-industry workshop on ways to convince consumers that milk is as good a "fun drink" as pop.

**REGULATOR -- IDENTIFIED PROBLEM**

A quota inspector finds that one dairy farm has produced too little milk for 2 consecutive months.

# PROBLEM SHEET 2.5

## Hog Production

**SUPPLIER -- IDENTIFIED PROBLEM**

A hog producer asks you to design a means of automatically feeding 200 pigs kept in ten 10' x 16' pens which are side by side with an aisle at one end and a barn well at the other.

**PRODUCER -- IDENTIFIED PROBLEM**

A hog producer finds that he is not able to control the temperature in the various parts of his barns to an accurate enough degree.

**PROCESSOR -- IDENTIFIED PROBLEM**

A meat packing plant has room to handle 75% more pigs than it can purchase. Management believes that they can sell all of the pork from these additional animals.

**MARKETER -- IDENTIFIED PROBLEM**

The meat manager of a large grocery store has several customers return packaged meat from the same packing company because it spoiled before use.

**REGULATOR -- IDENTIFIED PROBLEM**

Several samples of pork destined for export to the U.S.A. are found to contain sulfa drug residues.

# PROBLEM SHEET 2.6

## Horse Production

### SUPPLIER -- IDENTIFIED PROBLEM

An Alberta farrier is asked for a set of horseshoes that will stop a pleasure horse from kicking its forelegs when it brings its hind legs forward.

### PRODUCER -- IDENTIFIED PROBLEM

A horse breeder finds that, although he is allowing his foals to eat as much as they want, many of them are developing leg problems in spite of their parentage.

### PROCESSOR -- IDENTIFIED PROBLEM

European customers for Alberta horse meat want some of the product delivered fresh. This is expected to create some problems with inspection and regulation systems.

### MARKETER -- IDENTIFIED PROBLEM

A group of breeders asks you to develop a program that will convince ordinary people that riding and owning a horse is an affordable, enjoyable hobby that they can start without fear of appearing foolish or elitist.

### REGULATOR -- IDENTIFIED PROBLEM

On investigating a complaint to the SCPA you find four horses that clearly have not been fed for several days and whose hooves and general condition indicate several months of neglect.

# PROBLEM SHEET 2.7

## Broiler Production

### SUPPLIER -- IDENTIFIED PROBLEM

As a building contractor you are asked by a broiler chicken producer to build a chicken barn that will allow her to raise 5000 chickens in it with only one attendant.

### PRODUCER -- IDENTIFIED PROBLEM

An experienced producer finds that 15% of his flock has suddenly developed watery eyes, reduced food consumption and a generally unhealthy appearance.

### PROCESSOR -- IDENTIFIED PROBLEM

As a poultry processor you believe that more chickens would be sold if meat from low grade carcasses was completely removed from the skeleton and formed into patties of constant size and flavor. How can you make this innovation?

### MARKETER -- IDENTIFIED PROBLEM

A meat department manager finds that people prefer to buy packages of several pieces of one cut (e.g. 8 drumsticks) rather than whole chickens.

### REGULATOR -- IDENTIFIED PROBLEM

Salmonella bacteria; which cause severe food poisoning, are known to be very common in the meat of chickens. It appears that they can develop at any stage from slaughter to cooking.

# PROBLEM SHEET 2.8

## Egg Production

**SUPPLIER -- IDENTIFIED PROBLEM**

As owner of a small town feed mill you are being plagued by continuous breakdowns of your grinding and mixing machine.

**PRODUCER -- IDENTIFIED PROBLEM**

An egg producer's new automated collection system is breaking the shells of 10% of the eggs. This makes it impossible to meet the monthly egg quota or to maintain a profitable operation.

**PROCESSOR -- IDENTIFIED PROBLEM**

You receive 10,000 eggs daily which are to be graded, packaged or processed, and shipped to customers. Your staff has just informed you that they cannot agree to your contract offer and will be on strike tomorrow morning.

**MARKETER -- IDENTIFIED PROBLEM**

Egg sales are greatly reduced because former buyers are concerned about cholesterol in the yolks. How can this trend be reversed?

**REGULATOR -- IDENTIFIED PROBLEM**

There is a large demand among farmers for an opportunity to become commercial egg producers. However all of Alberta's share of national egg production is parcelled out.

# PROBLEM SHEET 2.9

## Turkey Production

### SUPPLIER -- IDENTIFIED PROBLEM

The incubator you use for turkey eggs has begun to malfunction and will not maintain a constant temperature around the eggs. This is your busiest season and you have 10,000 day old turkeys presold for delivery over the next two weeks.

### PRODUCER -- IDENTIFIED PROBLEM

An Alberta turkey producer wants to double the number of birds he raises. This requires a new broodhouse and an increased quota.

### PROCESSOR -- IDENTIFIED PROBLEM

You must develop a method of transporting one thousand live turkeys by semi-trailer truck from farm to processing plant. It must be both humane and efficient.

### MARKETER -- IDENTIFIED PROBLEM

There is no convenience food product based on turkey to compete for modern customers. Lead an industry-wide project to develop one.

### REGULATOR -- IDENTIFIED PROBLEM

A group of turkey growers has asked your office to develop standards for a new convenience product made of cut and battered turkey meat to be sold frozen for home use.

# PROBLEM SHEET 2.10

## Fur Production

### SUPPLIER -- IDENTIFIED PROBLEM

As a bank manager in northern Alberta you are asked to loan the money to set up a fox and mink ranch and to run it for three years.

### PRODUCER -- IDENTIFIED PROBLEM

You are a mink rancher, and suddenly in one litter you have one kit (baby mink) that is a completely new color pattern. How can you 1) make sure that the gene for this color is not lost, and 2) develop a complete line of mink this color?

### PROCESSOR -- IDENTIFIED PROBLEM

As a fur wholesaler you are concerned about the uneven quality of tanning in farm-raised fox pelts that you have been buying. How can this quality be raised and made more uniform?

### MARKETER -- IDENTIFIED PROBLEM

Many of your customers are complaining that they have been harassed by strangers about the cost of fur coats and about the cruelty of keeping or capturing animals for fur. You are concerned about the likelihood of declining sales.

### REGULATOR -- IDENTIFIED PROBLEM

As an SPCA inspector you receive complaints about techniques used in the fur ranching industry to kill their animals and remove the pelts.

# PROBLEM SHEET 2.11

## Honey Production

### SUPPLIER -- IDENTIFIED PROBLEM

For several years you have been importing bees from California for Alberta beekeepers. This year American bees are banned because of a disease outbreak. Your regular customers still need to restock their colonies.

### PRODUCER -- IDENTIFIED PROBLEM

As a Peace River area beekeeper, you have had hives destroyed by bears on five occasions this summer. Your hives are in six groups on widely separated fields.

### PROCESSOR -- IDENTIFIED PROBLEM

An Alberta honey processor finds that, while honey is available from many sources and his plant could package more than it does, there is no demand for increased amounts of honey.

### MARKETER -- IDENTIFIED PROBLEM

Lead an industry-wide conference to develop a specialty honey market based on bees raised with only specific flowers to feed on, e.g. dandelion honey, clover honey or lilac honey.

### REGULATOR -- IDENTIFIED PROBLEM

As an animal health inspector you have been informed that a parasitic bee mite is becoming a serious pest among bees in California. Since most Alberta apiarists import new bee colonies from California every spring you must seek their advice about ways to prevent this mite from invading Alberta.

# PROBLEM SHEET 2.12

## Commercial Grain Production

**SUPPLIER -- IDENTIFIED PROBLEM**

As operator of a farm supplies store you have been asked for chemical filters to fit tractor cab air conditioner intakes. There do not seem to be any available.

**PRODUCER -- IDENTIFIED PROBLEM**

As a grain producer you would like to have your tractor cab fitted with a chemical filter on its air intake so that you could spray your crops without wearing a face-mask.

**PROCESSOR -- IDENTIFIED PROBLEM**

As an ambitious entrepreneur in Red Deer you want to build a plant that will extract starch from wheat and convert it into a variety of chemicals. How can you begin?

**MARKETER -- IDENTIFIED PROBLEM**

Very little rye is planted or eaten in Canada. Develop a plan for some rye flour products that will increase demand for this grain.

**REGULATOR -- IDENTIFIED PROBLEM**

How can you develop an automated system to inspect grain for foreign objects, molds and dirt?

# PROBLEM SHEET 2.13

## Pedigreed Grain Seed Production

### SUPPLIER -- IDENTIFIED PROBLEM

As a seed test lab technician you are to certify that a supply of barley seed is free of disease.

### PRODUCER -- IDENTIFIED PROBLEM

Grain that you had intended to reserve for sale as seed appears to be developing mildew.

### PROCESSOR -- IDENTIFIED PROBLEM

Local seed growers need you to clean their seed almost twice as fast as you are equipped to do. How can you speed up the process.

### MARKETER -- IDENTIFIED PROBLEM

You must help the pedigreed seed industry convince farmers that they are better off buying pedigreed seed than saving some of their commercial crop to reseed.

### REGULATOR -- IDENTIFIED PROBLEM

Establish a set of standards for evaluating seed. Lead an industry workshop for advice on what to include.

# PROBLEM SHEET 2.14

## Commercial Forage Production

**SUPPLIER -- IDENTIFIED PROBLEM**

Several of your farm customers would like to convert from baling forage to silage making. They want a low cost way of trying out silage making and feeding.

**PRODUCER -- IDENTIFIED PROBLEM**

You have cut your hay and it is lying in the field waiting for baling. However it has been raining for some of every day since your cutting.

**PROCESSOR -- IDENTIFIED PROBLEM**

Your alfalfa dehydrating plant breaks down constantly during periods of heavy use. You must keep buying alfalfa because you have contracts with farmers, and you must keep making pellets because your customers need them.

**MARKETER -- IDENTIFIED PROBLEM**

As sales agent for an alfalfa dehydrating plant, you are to develop a set of arguments that will convince beef, dairy, sheep, and other livestock owners that they should use dried alfalfa pellets for some of their feeding.

**REGULATOR -- IDENTIFIED PROBLEM**

Establish a set of requirements for grading dried alfalfa pellets for export.

# PROBLEM SHEET 2.15

## Forage Seed Production

### SUPPLIER -- IDENTIFIED PROBLEM

As a farm accountant you are asked to set up a book-keeping system for a group of clients that will allow them to identify where they are wasting money and where they are spending too little.

### PRODUCER -- IDENTIFIED PROBLEM

To increase seed production in your forage crops, you would like to ensure that pollinating insects are always in your fields.

### PROCESSOR -- IDENTIFIED PROBLEM

You operate a seed cleaning plant and need a constant supply of seed to clean and certify. How can you assure this supply?

### MARKETER -- IDENTIFIED PROBLEM

As a certified seed producer and marketer you find that many potential customers are merely setting aside parts of their crop for use as next year's seed. How can you convince them to change?

### REGULATOR -- IDENTIFIED PROBLEM

Work with all levels of the industry to establish standards for certifying seed as pedigreed.

# PROBLEM SHEET 2.16

## Tree Production & Maintenance

### SUPPLIER -- IDENTIFIED PROBLEM

The most popular insecticide among your arborist clients has been withdrawn from sale as a health hazard. Your customers need something to use for the coming season.

### PRODUCER -- IDENTIFIED PROBLEM

You would like to have a truck-mounted mechanical arm to hold and cut the major branches of large trees. You feel that the chainsaw operator in a crane lift bucket is too hazardous to both your operators and bystanders.

### PROCESSOR -- IDENTIFIED PROBLEM

NOT APPLICABLE

### MARKETER -- IDENTIFIED PROBLEM

How can you establish a need among individual home-owners for a commercial pruning, spraying and general tree maintenance service to look after their trees?

### REGULATOR -- IDENTIFIED PROBLEM

As line inspector for an electric utility you find that a farm windbreak has grown tall enough to interfere with distribution wires along the road property line. This is a safety and service hazard.

# PROBLEM SHEET 2.17

## Fruit/Vegetable Production

### SUPPLIER -- IDENTIFIED PROBLEM

A local farmer has established an orchard of saskatoon bushes. You are a farm machinery dealer and have been asked for a modified harvester that will pick the fruit without any hand work.

### PRODUCER -- IDENTIFIED PROBLEM

You have heard that some buyers are paying a premium for vegetables and fruit than can be proven free of pesticides and chemical fertilizers. You would like to receive this higher price but aren't sure how to grow crops without them.

### PROCESSOR -- IDENTIFIED PROBLEM

You wish to develop a canning plant in Alberta to process peas, corn and beans. Before you proceed you need to be sure of a constant supply of vegetables.

### MARKETER -- IDENTIFIED PROBLEM

Saskatoons are a newly domesticated fruit that many people have picked wild, but nobody has bought in a store. Lead an industry workshop to develop a marketing plan for saskatoons.

### REGULATOR -- IDENTIFIED PROBLEM

Samples from several shipments of canned peas contain more than the allowable number of insect bodies. How can this problem be solved?

# PROBLEM SHEET 2.18

## Vegetable Production

### SUPPLIER -- IDENTIFIED PROBLEM

A market gardener has asked you to develop a refrigerated compartment for a one ton truck. You cannot find such a compartment available commercially.

### PRODUCER -- IDENTIFIED PROBLEM

As a market gardener you have developed a large and busy roadside stand at your farm gate. This year your road has been closed for repairs, and will not be re-opened until September. How will you sell your produce?

### PROCESSOR -- IDENTIFIED PROBLEM

You find customers prefer washed potatoes, however, this process increases spoilage. How can you meet customer demands without incurring excess waste?

### MARKETER -- IDENTIFIED PROBLEM

You have been asked to develop an empty block of urban downtown into a farmer's market to run every Saturday and Sunday from June 1 to October 31. With other industry representatives develop a market that will both function for producers and attract customers.

### REGULATOR -- IDENTIFIED PROBLEM

Develop a list of standards for farm and garden produce sold either from farm gate stands or at farmer's markets.

# PROBLEM SHEET 2.19

## Nursery & Greenhouse Production

### SUPPLIER -- IDENTIFIED PROBLEM

Several of your customers, all commercial greenhouse operators, want to replace their glass with something that will pass light as well but be unbreakable and insulate against heat loss. Can you find such a material?

### PRODUCER -- IDENTIFIED PROBLEM

You would like to expand your commercial greenhouse growing season to twelve-months, but the winter heating bills are too high. How can you make your greenhouses more fuel efficient?

### PROCESSOR -- IDENTIFIED PROBLEM

You buy flowers from a nursery to be resold as cut flowers. You would like the flowers you buy to hold their petals and appearance longer after they are cut.

### MARKETER -- IDENTIFIED PROBLEM

You operate a small nursery on the edge of an Edmonton suburb. How can you establish a big enough demand in the Edmonton market to expand your production by a factor of five? How can you expand your season beyond early spring?

### REGULATOR -- IDENTIFIED PROBLEM

Random inspection of hothouse tomatoes has revealed unacceptable levels of insecticide residues.

Meat Industry Feed Supplier

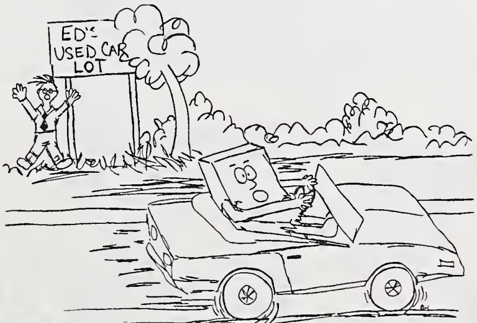
Grain Industry Seed Supplies

Fertilizer/Chemical Supplier

# Activity 3

# "WHY DON'T YOU TEST DRIVE A FEW?"

| | |
|---|---|
| **OBJECTIVE:** | Students will investigate how various life choices affect one's career possibilities. |
| **CURRICULUM FIT:** | Career and Life Management 20<br>Theme D - Careers and the World of Work |
| **LESSON CONCEPTS:** | Exploring potential occupational options<br>Importance of effective decision making to the career planning process. |
| **AGRICULTURE CONCEPTS:** | Diversity |
| **COGNITIVE LEVEL:** | Comprehension |
| **MATERIALS REQUIRED:** | Activity Sheets 1 - 10 (included) |
| **TIME REQUIRED:** | One 10 minute demonstration.<br>Students can run a sequence in short periods of idle time. |



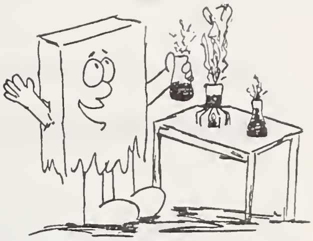
# BACKGROUND - For the Teacher

Strategic planning involves identifying goals, identifying resources, discovering those that match or conflict and then making decisions about what you want to accomplish. Strategic plans tend to be somewhat general in their statements and long term in their scheduling. In career planning, deciding what you want to do when you grow up is a strategic planning task.

Although this step is difficult enough, a strategic plan is only a first step in the planning process. The vital next step is to plan a method for reaching the goal you identify. This method becomes your operational plan. In career planning this involves identifying what training and experience is needed to enter the chosen career, where are those offered, how do you get into the programs, what can I do today to improve my chances.

Activity three illustrates the routes to entering a large number of careers in agriculture. It can be used in two ways. The procedure section describes a way for students to work out, without emotional risk, what paths various choices close off or open up in career planning. Without making the choice students can answer questions like "How will a 48% in Math 33 affect my chances of being a veterinarian?".

After they have tried several runs of the random chance route selection students may want to try using the goals and see what choices await them. Item 2 in Related Activities describes a way of doing this.



## PROCEDURE

### Part 1

**Preparation**

1. Mount Career Connections Poster on a cardboard backing.
2. a. Cut out the spinner arrow and the background.

   b. Fasten the pointer to the background with a thumb tack. Be certain the pointer can spin freely.

### Part 2

**Introduction**

3. Explain that the exercise is to demonstrate how people get to certain careers. It does not ask them to actually choose alternatives, but shows the results of several choices.
4. Demonstrate the procedure for moving through the chart.

   a. Spin the pointer then follow the pathway with the matching number.

   b. Repeat the process until you reach the end of pathway.

### Part 3

**The Activity**

5. Tell students that they are to run ten sets of spins, each over the next 3 or 4 days. (Deadline is your choice). They should write down the steps in each pathway.

### Part 4

**The Conclusion**

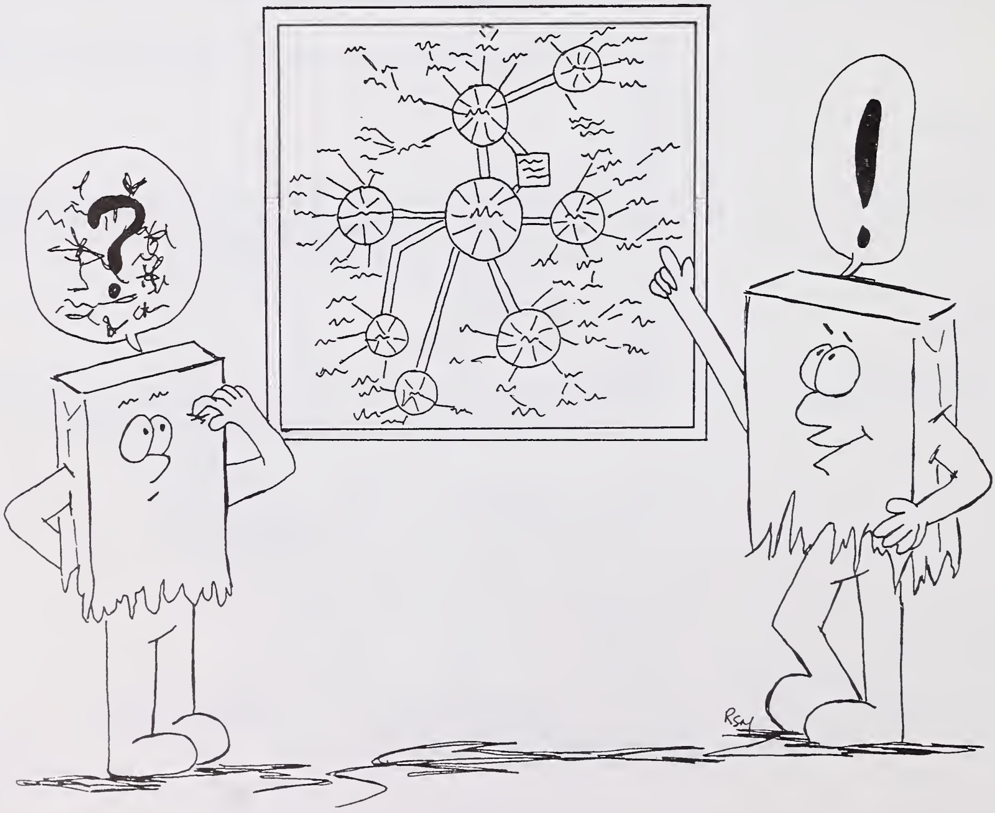
6. Lead a discussion in which students identify important choices to be made in choosing and preparing for a career.

## DISCUSSION QUESTIONS

1. What do you have to accomplish this year to ensure that you can enter the career you want?
2. What critical stages can you see on the way to your own career goal?
3. Are there unconventional ways to reach any of the career goals shown?

## RELATED ACTIVITIES

1. Interview someone in one of the careers indicated about how they got there and how you could do the same.
2. Choose a career you are interested in and work backward to where you are now, recording all of the essential choices along the route.



# CONTACT LIST

Camrose Lutheran College
4901 - 46 Avenue
Camrose, AB T4V 2R3
Registrar's Office ph. 679-1185
Edmonton Direct ph. 426-0501

Canadian Union College/
Parkview Adventist Academy
Box 430
College Heights (All Depts.)
Lacombe, AB T0C 0Z0
Registrar's Office ph. 782-3381

Concordia College
7128 Ada Blvd.
Edmonton, AB T5B 4E4
Registrar's Office ph. 479-8481

Fairview College
Box 3000
Fairview, AB T0H 1L0
Registrar's Office ph. 835-6600

Grande Prairie Regional College
10726 - 106 Avenue (Main Campus)
Grande Prairie, AB T8V 4C4
Registrar's Office ph. 539-2918

Green Certificate Program
Alberta Agriculture
2nd Floor, J.G. O'Donoghue Bldg.
7000 - 113 Street
Edmonton, AB T6H 5T6
ph. 427-2173

Lakeland College
Vermilion Campus
Vermilion, AB T0B 4M0
ph. 853-8400

Lethbridge Community College
3000 College Dr. S.
Lethbridge, AB T1K 1L6
Registrar's Office ph. 320-3280

Medicine Hat College
299 College Dr. S.E.
Medicine Hat, AB T1A 3Y6
Registrar's Office ph. 529-3821

Mount Royal College
4825 Richard Rd. S.W.
Calgary, AB T3E 6K6
Admissions
Registrar's Office ph. 240-3722

N.A.I.T.
11762 - 106 Street
Edmonton, AB T5G 2R1
Information ph. 471-7400

Olds College
Olds, AB T0M 1P0
Registrar's Office ph. 556-8281

Red Deer College
Box 5005
Red Deer, AB T4N 5H5
Registrar's Office ph. 342-3400

S.A.I.T.
1301 - 16 Avenue N.W.
Calgary, AB T2M 0L4
Registrar's Office ph. 284-8132

University of Alberta
89 Avenue & 114 Street (Campus)
Edmonton, AB T6G 2M7
Administration Building
Registrar's Office ph. 492-3113

University of Calgary
2500 University Dr. N.W.
Calgary, AB T2N 1N4
Registrar's Office ph. 220-5517

University of Lethbridge
4401 University Dr.
Lethbridge, AB T1K 3M4
Registrar's Office ph. 329-2231

# Meat Packing Plant Packager

# Potato Industry Processing

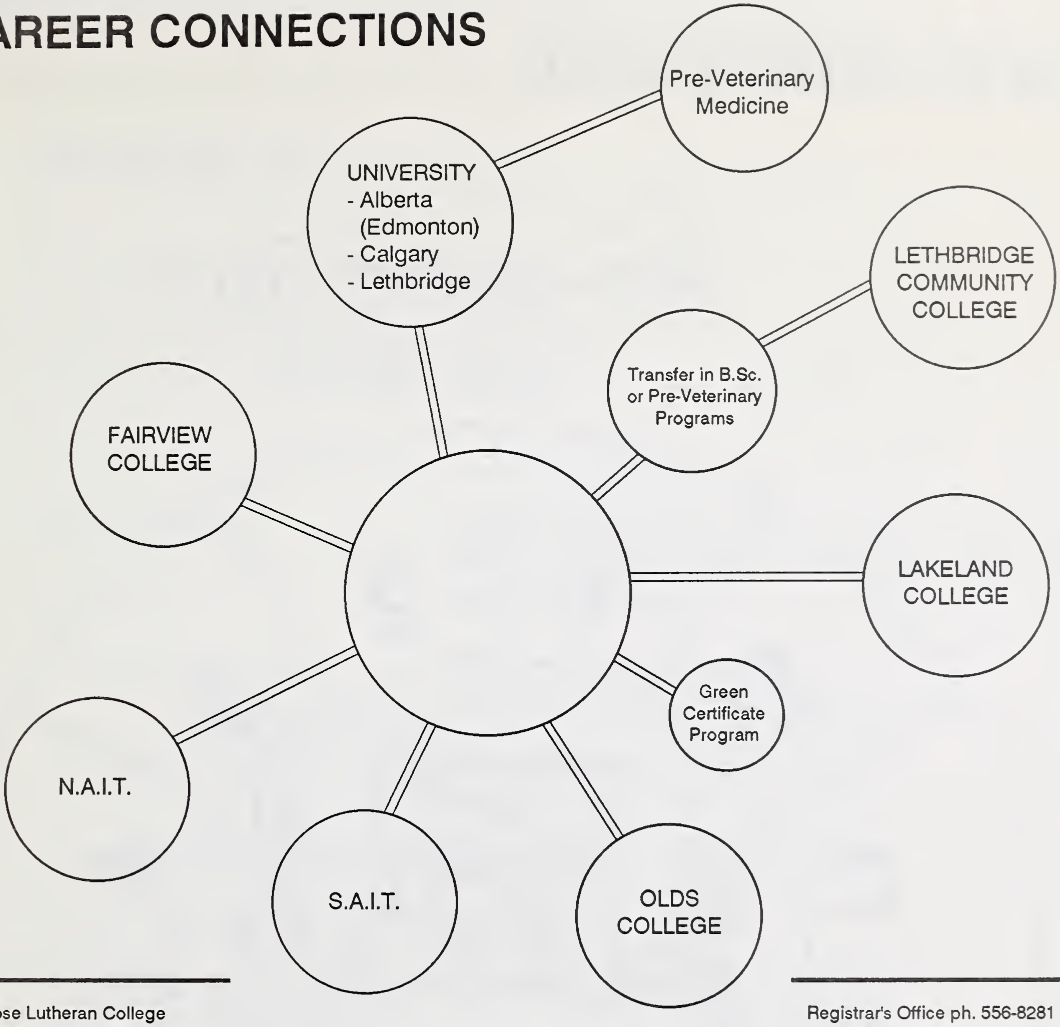
Potato Chip Factory -- Processing

Agricultural Fair Booth -- Marketing

Alberta
Alberta
COUNTRIES TO WHICH ALBERTA HAS SHIPPED BREEDING STOCK
Alberta

Agricultural Exhibit -- Marketing

# CAREER CONNECTIONS



## CONTACT LIST

Camrose Lutheran College
4901 - 46 Avenue
Camrose, AB T4V 2R3
Registrar's Office ph. 679-1185
Edmonton Direct ph. 426-0501

Canadian Union College/
Parkview Adventist Academy
Box 430
College Heights (All Depts.)
Lacombe, AB T0C 0Z0
Registrar's Office ph. 782-3381

Concordia College
7128 Ada Blvd.
Edmonton, AB T5B 4E4
Registrar's Office ph. 479-8481

Fairview College
Box 3000
Fairview, AB T0H 1L0
Registrar's Office ph. 835-6600

Grande Prairie Regional College
10726 - 106 Avenue (Main Campus)
Grande Prairie, AB T8V 4C4
Registrar's Office ph. 539-2918

Green Certificate Program
Alberta Agriculture
2nd Floor, J.G. O'Donoghue Bldg.
7000 - 113 Street
Edmonton, AB T6H 5T6
ph. 427-2173

Lakeland College
Vermilion Campus
Vermilion, AB T0B 4M0
ph. 853-8400

Lethbridge Community College
3000 College Dr. S.
Lethbridge, AB T1K 1L6
Registrar's Office ph. 320-3280

Medicine Hat College
299 College Dr. S.E.
Medicine Hat, AB T1A 3Y6
Registrar's Office ph. 529-3821

Mount Royal College
4825 Richard Rd. S.W.
Calgary, AB T3E 6K6
Admissions
Registrar's Office ph. 240-3722

N.A.I.T.
11762 - 106 Street
Edmonton, AB T5G 2R1
Information ph. 471-7400

Olds College
Olds, AB T0M 1P0
Registrar's Office ph. 556-8281

Red Deer College
Box 5005
Red Deer, AB T4N 5H5
Registrar's Office ph. 342-3400

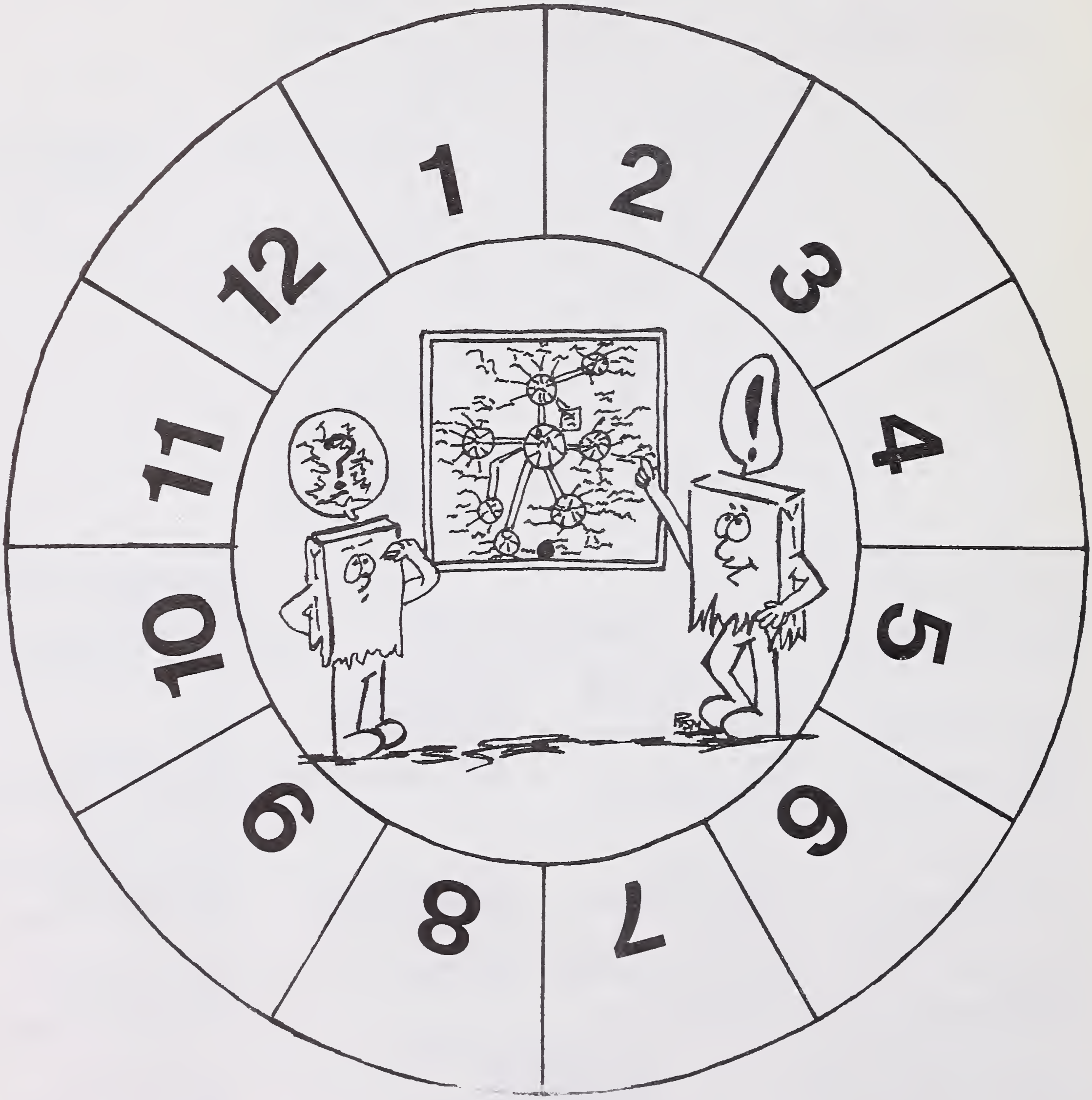
S.A.I.T.
1301 - 16 Avenue N.W.
Calgary, AB T2M 0L4
Registrar's Office ph. 284-8132

University of Alberta
89 Avenue & 114 Street (Campus)
Edmonton, AB T6G 2M7
Administration Building
Registrar's Office ph. 492-3113

University of Calgary
2500 University Dr. N.W.
Calgary, AB T2N 1N4
Registrar's Office ph. 220-5517

University of Lethbridge
4401 University Dr.
Lethbridge, AB T1K 3M4
Registrar's Office ph. 329-2231

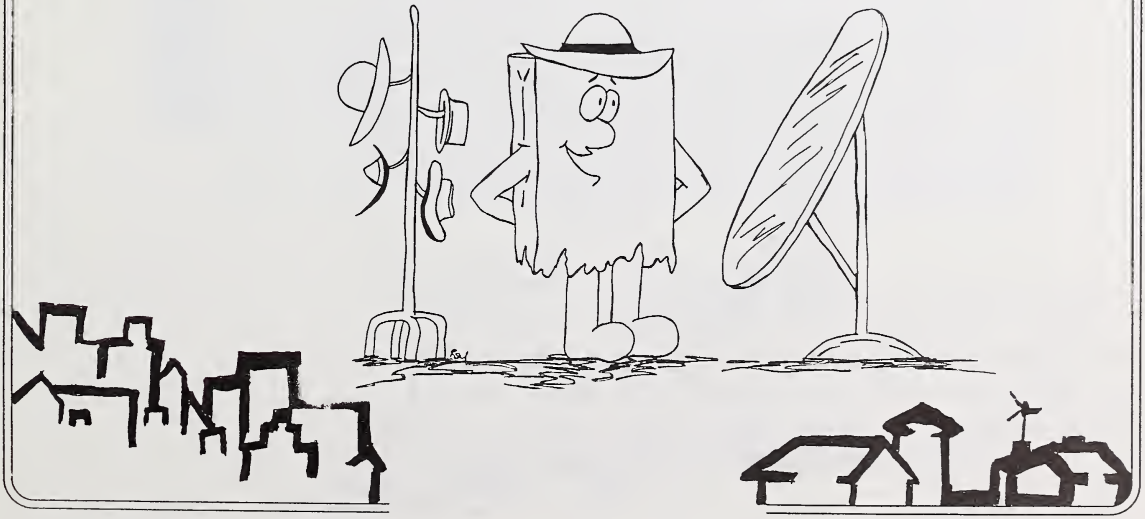
# DATA SHEET ONE



# Activity 4

# "THIS IS THE ONE FOR ME!"

| | |
|---|---|
| **OBJECTIVE:** | Students will state a career goal and identify major steps to be taken and obstacles to be avoided in achieving that goal. |
| **CURRICULUM FIT:** | Career and Life Management 20<br>Theme D - Careers and the World of Work |
| **LESSON CONCEPTS:** | Assess supporting and inhibiting factors<br>A personal career plan |
| **AGRICULTURE CONCEPTS:** | Diversity |
| **COGNITIVE LEVEL:** | Synthesis |
| **MATERIALS REQUIRED:** | Activity sheet 1 (included) |
| **TIME REQUIRED:** | 50 minutes |

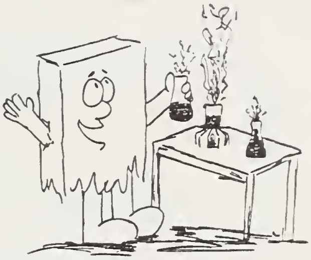


# BACKGROUND - For the Teacher

This activity will be most effective if students do it late in the unit. Essentially it asks them to state a career goal and identify steps by which they can reach it. They are asked to pay special attention to key achievements that might make their goal easier to reach, and to key problems that might set them back.

It is important for you to realize that this is a personal planning exercise. The more clearly students can state goals in the target area and at each step the better off they are, but a hazier view of what they want need not call for a low mark. It is important that they identify fast tracks and pitfalls in their path, but there is no standard of correctness beyond the student's opinion.

**NOTE**
You should act as recorder during the session. Aim for 12 or more entries on each question. Teacher Reference Sheets 4-1 and 4-2 include some items that were suggested in a writers' brainstorm on this topic.



## PROCEDURE

### Part 1

Preparation

1. Make a copy of Student Activity Sheet 1 for each student in your class.

### Part 2

Introduction

2. Explain that, in this activity, students are to consider their own choices and goals, and develop a plan for achieving them.

### Part 3

The Activity

3. Distribute Student Activity Sheet 1. Have students complete the goal statement in the upper right corner of the page.

4. Lead your students in a brainstorm session on career planning. The session should address two issues:

   a. What steps are important in achieving career goals?

   b. What events or actions can interfere with reaching career goals?

**RULES FOR BRAINSTORMING**

1. Everyone must contribute something, no matter how trivial.
2. Anyone may add to an existing suggestion.
3. No one may evaluate, criticize or ridicule a contribution.

**QUANTITY IS THE ONLY GOAL**

5. The pathway on Student Activity Sheet 4-1 leads from today to the goal. Ask your students to fill in each space with an activity that will help them reach their goal. In particular tell them to include an achievement that will accelerate their progress at the bottom of each ladder, and something that will set them back significantly at the top of each snake.

Part 4

Conclusion

6. When students have completed their sheets, they will have identified a long term career goal and several sub-goals.

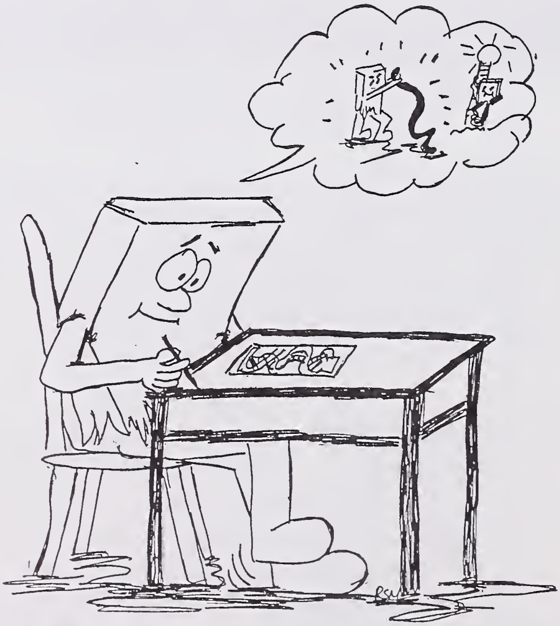
7. Ask each student to write out two things they can do immediately to meet a) the first goal, and b) the first shortcut goal that they have set.

## DISCUSSION QUESTIONS

1. How do you decide on an immediate goal if you don't know what you want to do with your life?

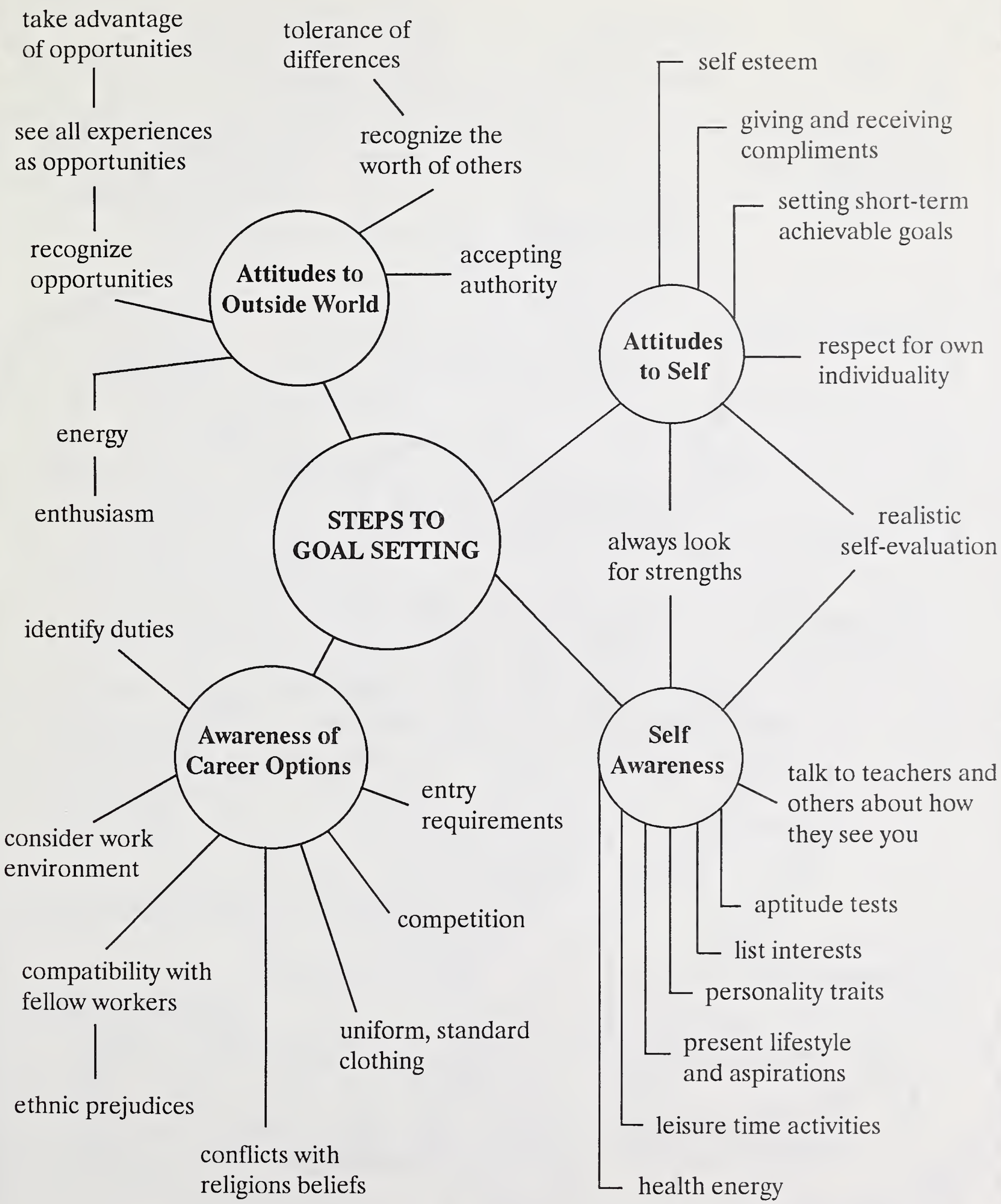
## RELATED ACTIVITY

1. Interview someone already working at the career you want and someone who is training to enter it. Find out what their main preparation tasks have been.



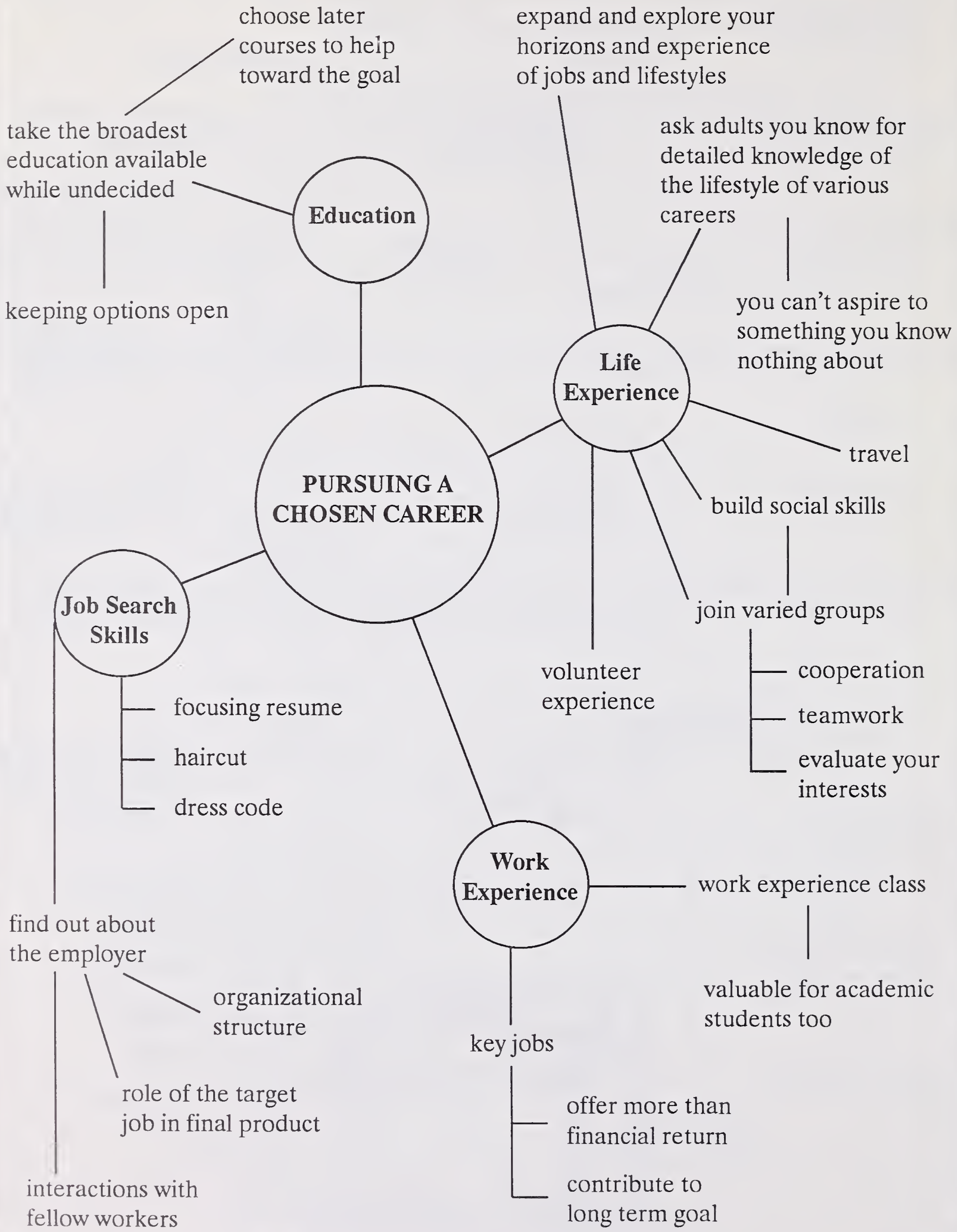
# TEACHER REFERENCE SHEET 4.1

### Items From A Brainstorm On Goal Setting

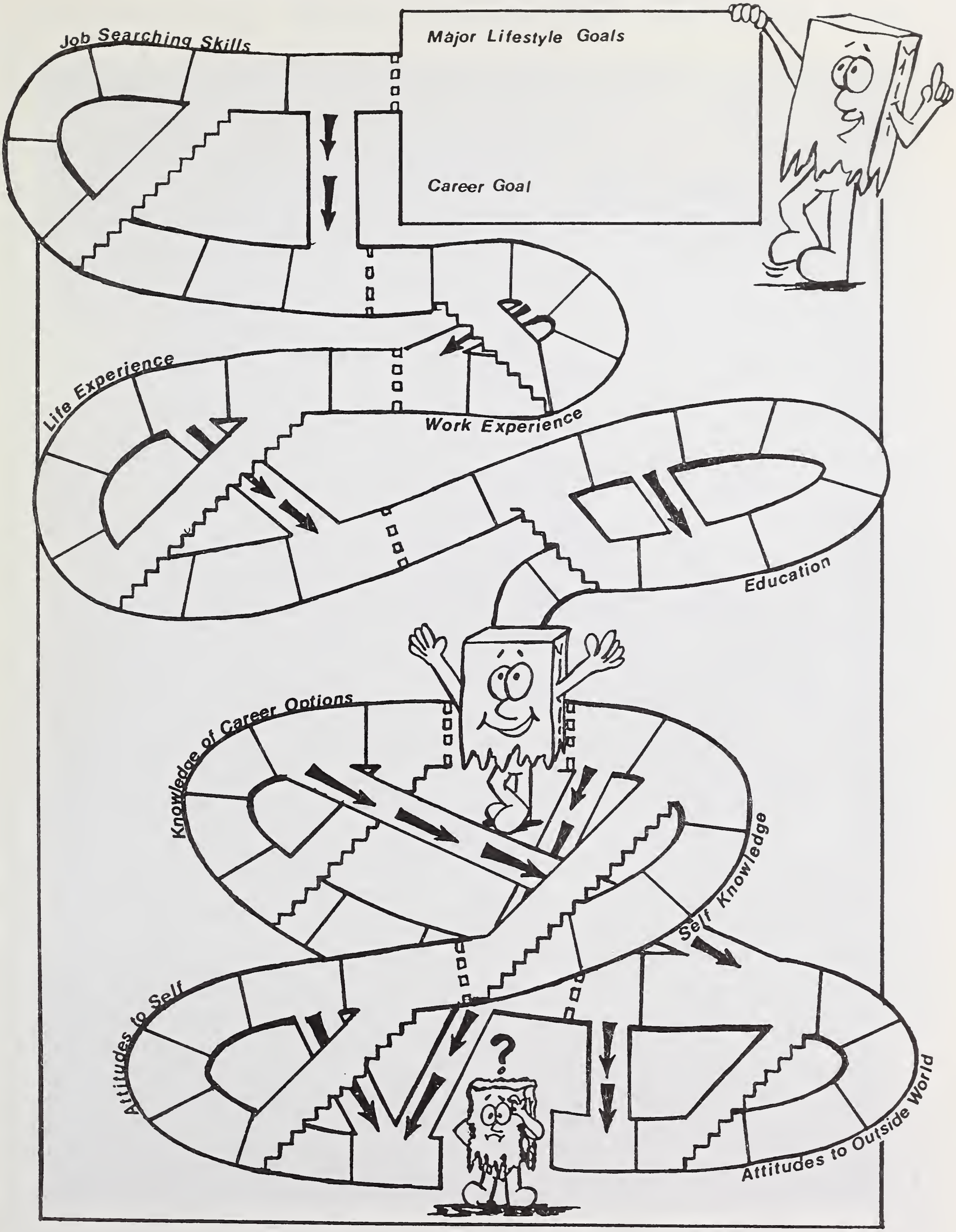

STEPS TO GOAL SETTING
Attitudes to Outside World
take advantage of opportunities
see all experiences as opportunities
recognize opportunities
tolerance of differences
recognize the worth of others
accepting authority
energy
enthusiasm
Attitudes to Self
self esteem
giving and receiving compliments
setting short-term achievable goals
respect for own individuality
always look for strengths
realistic self-evaluation
Awareness of Career Options
identify duties
consider work environment
compatibility with fellow workers
ethnic prejudices
conflicts with religions beliefs
uniform, standard clothing
competition
entry requirements
Self Awareness
talk to teachers and others about how they see you
aptitude tests
list interests
personality traits
present lifestyle and aspirations
leisure time activities
health energy

# TEACHER REFERENCE SHEET 4.2

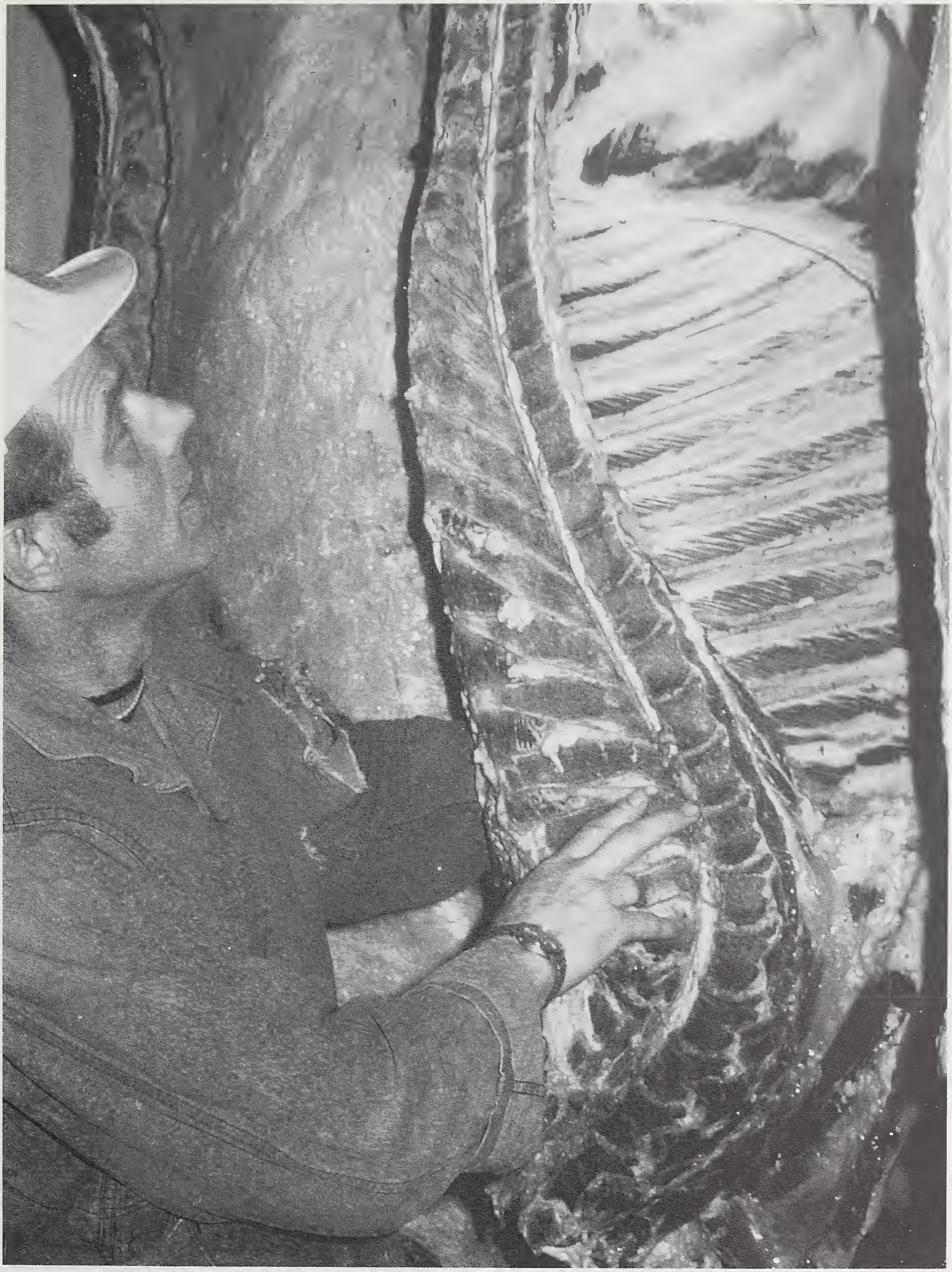
## Items From A Brainstorm On Pursuing Goals


PURSUING A CHOSEN CAREER
Education
take the broadest education available while undecided
choose later courses to help toward the goal
keeping options open
Life Experience
expand and explore your horizons and experience of jobs and lifestyles
ask adults you know for detailed knowledge of the lifestyle of various careers
you can't aspire to something you know nothing about
travel
build social skills
join varied groups
cooperation
teamwork
evaluate your interests
volunteer experience
Job Search Skills
focusing resume
haircut
dress code
find out about the employer
organizational structure
role of the target job in final product
interactions with fellow workers
Work Experience
work experience class
valuable for academic students too
key jobs
offer more than financial return
contribute to long term goal

# STUDENT ACTIVITY SHEET 4.1



# Beef Inspector



Pork Inspector

# Microbiologist

Chemist

Test Crops -- Research

# References

1. **Alberta Transfer Guide 1987-88 for Post Secondary Institutions**

   Alberta Council on Admissions and Transfers
   11160 Jasper Avenue
   Edmonton, AB T5K 0L3
   Telephone: 422-9021

2. **Canadian Classification and Dictionary of Occupations**

   1971, Volumes 1 and 2
   Publisher -- Employment and Immigration Canada

3. **Canadian Classification and Dictionary of Occupations**

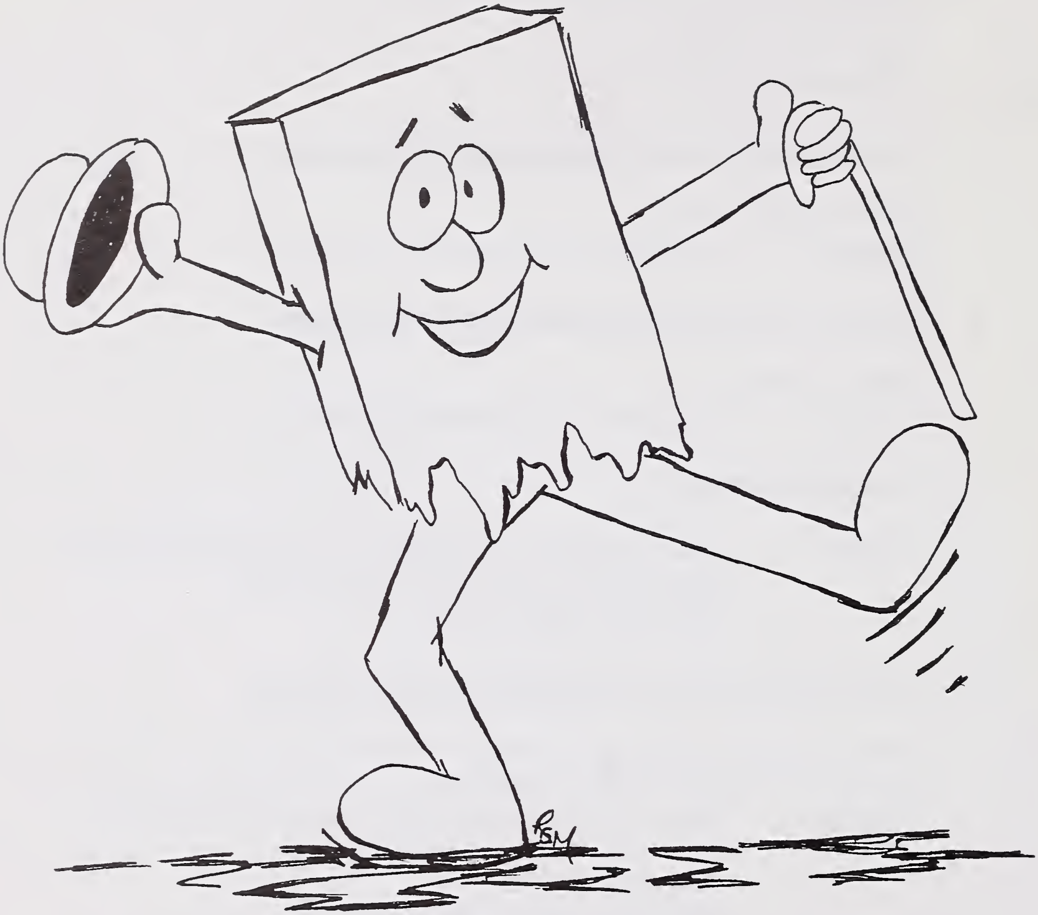
   1989 - 9th Edition
   Publisher -- Employment and Immigration Canada

4. **Occupational Profiles**

   Publisher -- Alberta Career Development and Employment Branch
   Park Square Building, 10001 Bellamy Hill
   Edmonton, AB T5J 3W5

5. **Post Secondary Graduate Employment Follow-Up Survey**

   Alberta Colleges and Technical Institutes - 1985, Volume 1
   (Summary of Current Labor Force Status)
   Publisher -- Alberta Career Development and Employment Branch
   18th Floor, Park Square Building
   10001 Bellamy Hill
   Edmonton, AB T5J 3W5


RSM

N.L.C. - B.N.C.

3 3286 11633172 5